

LEHIGH ALUMNI BULLETIN



CAMPUS VIEW SHOWING "WASHINGTON'S HEAD"

VOLUME 11

JANUARY, 1924

NUMBER 4

Published Monthly from October to June, inclusive, by the Alumni
Association of Lehigh University, Inc.

FORT PITT BRIDGE WORKS

OF PITTSBURGH, PA.

BRIDGES, BUILDINGS STRUCTURAL STEEL

**General Office,
20th Floor, Oliver Building, Pittsburgh
New York Office, 29 Broadway
Chicago Office, Ashland Block
Cleveland Office, Bulkley Building
Purchasing Dept. and Works, Canonsburg**

**H. R. BLICKLE, '93,
SCHUYLER B. KNOX, '93,
P. B. STRAUB, '97,
E. H. BEAZELL, '90,
A. SHELDON, '93,**

**President
Vice-President
Secretary and Treasurer
Works Manager
Asst. Chief Engineer**

ASSOCIATED WITH THE COMPANY

N. G. Smith, '06; E. K. Adams, '16; J. M. Straub, '20



MACHINE SHOP AND FOUNDRY
INDUSTRIAL WORKS, BAY CITY, MICH.

**We Design,
Manufacture and Erect**

Steel Structures for
Industrial Buildings
Bridges and Girders
Power Plants
Viaducts
Lock Gates
Foundries and Machine Shops
Train Sheds
Warehouses
Crane Runways
Office and Store Buildings
Etc.

McClintic-Marshall

McClintic-Marshall Company

General Offices: 1201 Oliver Building, PITTSBURGH, PA.

C. D. MARSHALL, '88, Pres.

H. H. McCLINTIC, '88, Vice-Pres.

R. W. KNIGHT, '94
Mgr. Foreign Dept.

G. R. ENSCOE, '96
Mgr. New York Office

C. M. DENISE, '98
Contracting Manager

T. L. CANNON, '03
Mgr. Rankin Works

R. McMINN, '07
Engineer

F. U. KENNEDY, '07
Mgr. Philadelphia Office

E. F. GOHL, '07
Mgr. Baltimore Office

L. A. WALKER, '08
Mgr. Detroit Office

G. A. CAFFALL, '10
Mgr. of Erection

McClintic-Marshall

Steel Bridges and Buildings

American Abrasive Metals Co.

(Founded by Wm. H. Sayre, '86)

50 CHURCH ST.

NEW YORK CITY

FERALUN
Anti-Slip Treads

[A patented combination of iron and abrasive grit]

To Prevent Slipping Accidents

Its peculiar properties make it the longest wearing, most efficient
anti-slip material obtainable

For

Floor Plates

Stair Treads and Landings

Door Saddles

Car Steps and Platforms

Coal Hole Covers

Cover Plates, etc.

General Industrial Uses

Its extreme durability, when subjected to severe abrasive action
make it most useful and economical in a wide variety of fields

Wheel Truing Brake Shoes

Pug Mill Paddles

Rubble Blades

Liner Plates, etc.

For Special Work—where Bronze or Aluminum is required

“BRONZALUN”

(The “Grit” Cast in Bronze)

“ALUMALUN”

(The “Grit” Cast in Aluminum)

“VULCALUN”

(Vulcanized Rubber Impregnated by the Grit)

Sole Representatives for United States and Canada for

“CARBORUNDUM ANTI-SLIP TILE”

R. S. EDMONDSON, '06, President

G. P. BARTHOLOMEW, '96, Vice-Pres.

WM. H. SAYRE, 21

GEORGE C. HUTCHINSON, '94

District Representative

Farmers Bank Bldg., Pittsburgh, Pa.

B. P. LAMBERTON, '05

District Representative

Washington, D. C.

THE DRAVO CONTRACTING COMPANY

PITTSBURGH

DIFFICULT FOUNDATIONS, RIVER and HARBOR IMPROVEMENT
BRIDGE PIERS and DAMS, MINING PLANT CONSTRUCTION
SHAFTS, SLOPES and TUNNELS

ASSOCIATED WITH THE COMPANY

F. R. DRAVO, '87
R. M. DRAVO, '89
J. D. BERG, '05

E. T. GOTT, '06
L. C. ZOLLINGER, '09
V. B. EDWARDS, '11
W. J. JUDSON, '21

L. BEVAN, '21
E. M. ENSLIN, '22
R. R. RHOD, '22

DRAVO - DOYLE COMPANY

PITTSBURGH

CLEVELAND

INDIANAPOLIS

PHILADELPHIA

STEAM and HYDRAULIC EQUIPMENT, COMPLETE POWER
PLANT, WATER WORKS INSTALLATIONS

ASSOCIATED WITH THE COMPANY

F. R. DRAVO, '87

R. M. DRAVO, '89

S. P. FELIX, '03

J. D. BERG, '05

W. P. BERG, '15

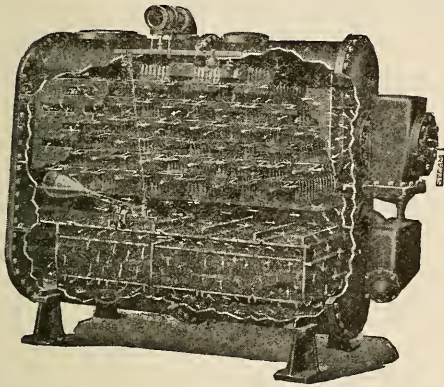
E. W. ESTES, '20

VICTOR
BITUMINOUS COAL
ANTHRACITE COAL
AND COKE

GRAND CENTRAL TERMINAL
NEW YORK CITY
NORTH AMERICAN BUILDING
PHILADELPHIA

REMBRANDT PEALE, '83

WORTHINGTON



Worthington-Stilwell open feed water
heater filters the feedwater twice.

Pans cannot clog with scale.

Flanges are machined—no caulking.

Boiler Feed Water Heating

When water is heated before it is pumped into a boiler there is an average saving in coal of one per cent. for every eleven degrees temperature added to the water. Eleven degrees added to the water takes one per cent. off the coal bill is another way of putting it.

W 122.8

WORTHINGTON PUMP AND MACHINERY CORPORATION

C. P. COLEMAN, '88, President.

Executive Offices : 115 Broadway, New York City. Branch Offices in 24 Large Cities.

WHITE & BRO.

INCORPORATED

SMELTERS AND REFINERS

412 NORTH AMERICAN BUILDING

PHILADELPHIA

HARRY A. WHITE, '95

C. B. WHITE, '05

PUMPING MACHINERY

WILSON-SNYDER MANUFACTURING CO.

H. D. Wilson, '01, President

PITTSBURGH, PA.



ESTABLISHED 1857

INCORPORATED 1906

T. B. WOOD'S SONS COMPANY

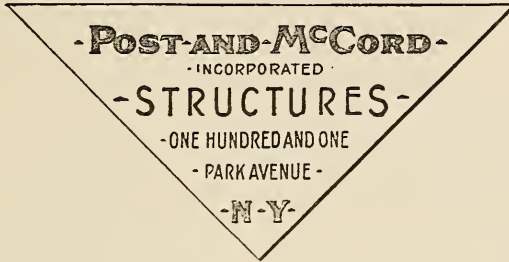
CHAMBERSBURG, PA.

**MODERN AND APPROVED APPLI-
ANCES FOR THE TRANSMISSION
OF POWER**

CHAS. O. Wood, '92

T. B. Wood, '98

G. H. Wood, '99



SPECIALISTS
IN
DESIGN AND CONSTRUCTION

AUBREY WEYMOUTH, '94
CHIEF ENGINEER

Empire Coal Mining Company

Miners and Shippers

EMPIRE
Bituminous Coal

Stephen Girard Building
PHILADELPHIA

WM. ALDER WEBB, '91, President
FRANK M. KEISER, '20

OFFICIAL DIRECTORY ALUMNI ASSOCIATION LEHIGH UNIVERSITY, Inc.

President: C. W. Hudson, 15 Park Row, New York City.
Vice-President: H. A. White, North American Bldg., Philadelphia, Pa.
Vice-President: T. Burns, care of Bethlehem Steel Co., Buffalo, N. Y.
Treasurer: J. A. Frick, 516 Hamilton St., Allentown, Pa.
Secretary: Walter R. Okeson, Drown Memorial Hall, Bethlehem, Pa.
Archivist: Preston A. Lambert, 323 Centre Street, Bethlehem, Pa.
Asst. Secretary and Treasurer: A. E. Buchanan, Jr., Drown Hall, Bethlehem, Pa.

Honorary Alumni Trustees

Homer D. Williams, Carnegie Bldg., Pittsburgh, Pa.
William C. Dickerman, 165 Broadway, New York, N. Y.
Taylor Allderdice, Frick Bldg., Pittsburgh, Pa.
Aubrey Weymouth, 101 Park Avenue, New York City.
H. D. Wilson, 2 Ross Street, Pittsburgh, Pa.
A. C. Dodson, care of Weston Dodson Co., Bethlehem, Pa.

Alumni Members Athletic Committee

Eugene G. Grace, '99
D. M. Petty, '09.
George C. Beck, '03.
Walter R. Okeson, '96, Treasurer.

Joint Endowment Committee

E. G. Grace, Honorary Chairman.
W. C. Dickerman, Executive Chairman.
A. Weymouth, Vice-Chairman.
H. S. Drinker.
C. D. Marshall.
F. R. Dravo.
C. W. Hudson.
F. Baker, Jr.
H. D. Wilson.
W. R. Okeson, Campaign Manager.

Alumni Committee on Athletics

D. M. Petty, Chairman.
C. I. Lattig.
H. R. Walters.
Geo. C. Beck.
V. J. Pazetti.
F. L. Stephenson.
C. E. Siebecker.
W. R. Okeson, Secretary.

Secretaries Local Alumni Clubs

Arkansas Lehigh Club, Charles H. Miller, '88, Secretary, 2516 Broadway, Little Rock, Ark.
Chicago Lehigh Club, H. W. Kern, '92, Secretary, 179 W. Washington St., Chicago, Ill.
Detroit Lehigh Club, W. A. Draper, '07, Secretary, 2189 Montclair Ave., Detroit, Mich.
Intermountain Lehigh Club, H. L. Baldwin, '07, Secretary, Box 115, University of Utah, Salt Lake City, Utah.
Lehigh Club of Central Pennsylvania, Holden I. Tripp, '10, Secretary, Camp Hill, Pa.
Lehigh Club of China, Yen Te Ching, '01, President, Wuchang, China.
Lehigh Club of Cuba, Conradi E. Martinez, '01, President, Principe 27, Havana, Cuba.

Lehigh Club of New England, D. K. Dean, '06, Secretary, Allberger Pump and Condenser Co., 88 Broad St., Boston, Mass.

Lehigh Club of Northern New York, N. R. Munkelwitz, '18, Secretary, 23 Mynderse St., Schenectady, N. Y.

Lehigh Club of Northern Ohio, G. P. Nachman, '14, Secretary, 1771 East 45th Street, Cleveland, Ohio.

Lehigh Club of Southern New England, J. W. Thurston, '96, Secretary, 168 N. Quaker Lane, Hartford, Conn.

Lehigh Club of Western New York, Richard Stockton, '10, Secretary, 47 Norwood Avenue, Buffalo, N. Y.

Lehigh Home Club, M. L. Jacobs, '10, Secretary, care of Bethlehem Steel Co., Bethlehem, Pa.

Maryland Lehigh Club, A. J. Kutzleb, '13, Secretary, care of Manhattan Rubber Co., 208 W. Pratt St., Baltimore, Md.

New York Lehigh Club, Morton Sultz, '12, Secretary, Amer. T. & T. Co., 195 Broadway, New York City.

Northeast Pennsylvania Lehigh Club, R. A. Stull, '19, Secretary, 182 S. Franklin St., Wilkes-Barre, Pa.

Philadelphia Lehigh Club, Moriz Bernstein, '96, Secretary, 2130 EStaugh St., Philadelphia, Pa.

Pittsburgh Lehigh Club, George M. Baker, '07, Secretary, General Electric Co., Oliver Bldg., Pittsburgh, Pa.

Southern Anthracite Lehigh Club, Ray B. Serfass, '09, Secretary, 113 N. Centre St., Pottsville, Pa.

Washington Lehigh Club, H. J. Jackson, '08, Secretary, 514 Union Trust Bldg., Washington, D. C.

Southwestern Lehigh Club, F. P. Lawrence, '10, Secretary, care of Southwestern Telephone and Telegraph Co., St. Louis, Mo.

ALUMNI BULLETIN

OF

LEHIGH UNIVERSITY

PUBLISHED MONTHLY FROM OCTOBER TO JUNE, INCLUSIVE, BY THE ALUMNI ASSOCIATION, DROWN HALL, BETHLEHEM, PA.
SUBSCRIPTION PRICE, \$2.00 A YEAR

MEMBER OF ALUMNI MAGAZINES ASSOCIATED

Entered as second class matter at Bethlehem, Pa., Post-office.

VOLUME 11

JANUARY, 1924

NUMBER 4

NEWS AND COMMENT

Shall We Have A Graduate Manager Among the other important matters discussed at the mid-winter meeting of the Board of directors of the Alumni Association was the question of

athletic policy, which has been under consideration by them since last June. The feeling has been very strong that the Alumni should either withdraw from any participation in athletic management and financial support or else insist that some definite forward-looking policy be adopted that every one can work for. The sentiment against the importation of athletes from other colleges has borne fruit and we now have none on our teams. Alumni aid to athletes has been limited entirely to some scholarships which are awarded on a fixed basis of merit, and the results published in the college paper. No one is eligible to these scholarships until he has been at Lehigh for at least a year. The Students' Self-Aid Bureau, which was established through Alumni effort, is now self-sustaining and its operation is open at all times to the inspection of faculty, the alumni and the public. A real Freshman rule with teeth has been adopted requiring a man to pass a minimum of thirty hours before he is considered a Sophomore and eligible to try for a Varsity team.

Having thus limited ourselves severely as to material for our teams to men who choose Lehigh because of what she openly has to offer them in the way of securing an education and who prove their ability to meet the stiff scholastic requirements of our University, it behooves us to give these men the best of training and coaching so that we can develop players. Having gone on record without a dissenting voice as against "buying" players, we must "make" them if our teams are to win victories. The Alumni want a policy worked out and adopted which will secure this result. This will require study and discussion but the first step is doubtless to put our athletics on a firm financial basis by budgeting our expenditures, carefully stopping all leaks,

taking every possible step for legitimately increasing receipts and then from whatever resulting net income there is, securing the ablest possible coaches for our teams. It makes no difference to us whether or not these coaches are seasonal or all the year round employees. What we want is class so that we can feel that no stone is being left unturned to develop to the utmost the potentialities of our material.

In short, what we would like to see is a graduate manager administering a progressive athletic policy backed by a live wire Athletic Committee and with the Department of Physical Education run by "Bosey" in such a way as to not only furnish healthy exercise for all undergraduates but, as a by-product, producing seasoned athletic material for our teams. Relieved of the heavy burden of business management of intercollegiate competition and concentrating on the physical development of our succeeding crops of youngsters, he should be able to do wonders. Certainly no man has had greater experience, possesses more human sympathy and better understands boy psychology than does "Bosey" Reiter. It looks like a good bet if we have pluck enough to "play it straight across the board."

* * *

Class of '23 and Its Memorial Last spring the Class of '23 decided that their Memorial should find expression in the new Alumni Memorial Building

and decided to set aside funds to put in the mantel in the main Alumni office. The architects are drawing plans for a special memorial mantel and '23 takes its place as the first class to put into the new Alumni building a permanent exhibit of class interest in this great project. Doubtless many more such memorials will follow. Class tablets in the Memorial Hall, telling the story of the service of the members of the class and commemorating the sacrifice of class-mates who gave their lives; memorial windows in stained glass; a clock and a set of chimes for the tower; all these

may some day materialize through individual or class generosity. At the present, however, no memorial can beat a mantel, for these mantels are not included in the contract and we need four more.

* * *

Nominations In the minutes of the for Alumni Alumni Directors' meeting, Officers published elsewhere in this

issue, you will find that the Secretary and Editor is instructed to ask the active members of the Alumni Association to send in suggestions to the Nominating Committee to aid them in their task of picking out men for the year's ticket. In accordance with my instructions, I will first give you the offices which are to be filled:

President—one year term.

Two Vice-Presidents—one year term.

Alumnus Trustee—six year term, to succeed H. D. Wilson, '01, who was elected for a one year term last June.

Assistant Secretary and Treasurer—one year term, to succeed A. E. Buchanan, Jr., '18.

To tell the truth, I don't think the Nominating Committee or anyone else has any doubt as to who should be nominated for the last two offices. Their job will consist in finding out if the present incumbents will accept the nomination. Neither of these offices are properly one year offices. But on account of the trustees' action in lengthening the term of office of an alumnus trustee from four to six years when they increased the number of such trustees to six, it was necessary to elect two trustees last year, one for six years and the other for one year. In the case of the Assistant Secretary and Treasurer, no term was set in the amendment to the By-Laws, which make this officer a director of the Association. Until the By-Laws are amended so as to definitely fix the term of this office, annual re-election is necessary.

In making suggestions for President and for Vice-Presidents for next year, please send your letter to one of the three members of the Nominating Committee. Their names and addresses are as follows:

Homer D. Williams, Carnegie Building, Pittsburgh, Pa.

William C. Dickerman, 165 Broadway, New York City.

Taylor Alderdice, Frick Building, Pittsburgh, Pa.

* * *

Endowment Campaign Of course every alumnus interested in Lehigh will subscribe. Equally of course, sooner or later, some canvasser will reach him. But why wait on the canvasser?

Think of what it means to a busy man (and I know mighty few Lehigh men who are not eternally, not to say infernally, busy) to go sometimes three or four times to your office or home in an attempt to find you. You probably know as much about the campaign as the canvasser. You certainly know and love Lehigh as much as he does. Why not canvass yourself? Write for a card and fill it out and send it in.

Your trouble is that old curse of procrastination. We all have it in us and personally I am one of the worst of mankind in this particular. But if you knew how badly Lehigh needs your help, you would vault a four-rail fence and "come a-running" to her assistance.

We are asking this man who we called to the presidency to make "a new heaven and a new earth" for us and so far we haven't given him enough to balance his budget if he does only the things necessary to keep the bottom from falling out of "the old oaken bucket." That's a fine sentimental song and many shed tears when they think of that bucket and its moss-grown traditions, but if somebody don't put up the cash to re-cooper it occasionally, you know that sentiment won't keep it from falling to pieces.

You know that Lehigh song:

"Rare old, fair old, square old college,
At your name ten thousand cry;
'Rah, 'rah, 'rah, 'rah, 'rah for Alma Mater,
'Rah, rah for old Lehigh."

I haven't any doubt that ten thousand cry "Rah," but I want to call your attention to the fact that less than TWO THOUSAND have as yet brought a blotter into close contact with their name on a pledge card.

Of course you've got troubles of your own. I don't ask you to disown one of them. Just take Lehigh's troubles into the family with yours, and when you start to cut the loaf, slip a slice onto Lehigh's plate.

Perhaps you fear the slice will not be large enough to be acceptable. In that you are wrong. You and you only know the size of the loaf and the number of hungry mouths at the table. No one will question the size of your gift, no matter how small it may be. After all it is a gift unless you are one of those rare souls who really feel an obligation for the education they have been given. And it is an old saying that no one "looks a gift horse in the mouth."

Ask yourself two questions—"What has Lehigh done for me?" and "What have I done for Lehigh?" If Lehigh did nothing for you, the fault was yours. If you do nothing for Lehigh, your loss will be even greater than hers.

ENDOWMENT CAMPAIGN

**BIG PAYMENTS IN DECEMBER—ACTUAL CASH ADDITION TO
LEHIGH'S ENDOWMENT PASSES HALF-MILLION MARK—
SUBSCRIPTIONS INCREASE FROM \$2,096,000 TO
\$2,192,000**

The December payments on subscriptions exceeded our highest expectations and January 3, 1924, found us with net receipts (after paying all the expenses to date of the campaign) of \$326,822. The General Education Board (Rockefeller Foundation) had advised us that they would consider the Carnegie Corporation pledge as cash provided we secured a letter from them stating that we were fulfilling the conditions set up in their pledge, that they were prepared to pay us \$250,000 as soon as those conditions were completely fulfilled (provided this was before January, 1926) and that until then they would pay us interest at 5% per annum on the amount of their pledge. This letter we secured and in consequence were able to make requisition on the General Education Board for \$192,274. This made a total cash increase in our endowment of \$519,096. Dean Keppel, President of the Carnegie Corporation, told me that they were ready ready to pay us pro-rata if we desired it, so that another \$175,000 is available if we want it. But as we are getting interest on the whole amount of the pledge we will not make any requisition on the Carnegie Corporation until we are able to ask for it in full. It ought not to be long before we can claim the entire amount of these two pledges if the payments continue to come in as rapidly as they have this month. Since making out the above requisition on January 3 we have received additional payments of approximately \$35,000.

Increase in Fund Since December 14

Naturally we expected very little increase from December 14, 1923, to January 14, 1924, as the holiday season we felt would temporarily put a stop to canvassing by our committees. To our surprise and gratification the new subscriptions during this period totalled \$96,285.00. This splendid showing was made possible largely through a generous contribution of \$50,000 from Andrew W. and R. B. Mellon, of Pittsburgh. This is the first really big donation we have received from outside sources and it certainly heartened us wonderfully, for we were beginning to feel discouraged about the lack of any sizable subscriptions from people outside the Lehigh family. This gift was the result of work done by those two 100% Lehigh men, H. H. McClintic, '88, and C. D. Marshall, '88. It shows, as do all other gifts we have received from outsiders, that the only successful plan to be followed is for each of us to solicit the interest of our own friends and business associates. Lehigh alumni must sell Lehigh to the people who know and believe in them. To try and sell to strangers is shooting with a blunderbuss at the landscape. You may bring down some game, but the chances are all against you. On the other hand if you tell your friends about Lehigh and what you are trying to do for her you can be reasonably sure of some contributions. Even though they are small they are most welcome. Surely every Lehigh man has one or more friends who would give at least fifty or a hundred dollars to Lehigh if they were asked. I certainly wish you chaps would have more faith in Biblical sayings, as for instance: "Ask and it shall be given unto you; seek and ye shall find." (I didn't look it up and I'm not certifying to it being correctly quoted, but that's the sense of it. And that it's plumb full of sense has been proven by the few Lehigh Alumni who have tried it.)

Corporation Gifts

That brings us right up to the question of securing gifts from corporations. Massachusetts Institute of Technology went after them and secured over a million. Their own alumni did it by presenting the "Technology Plan" to the corporations with which they were personally affiliated. It was the same story again—"Ask your friends and business associates." Stevens Institute of Technology is doing it now with considerable success.

So that every Lehigh man may be conversant with the text of the contract the University is prepared to enter into with concerns contributing at least \$1000 a year for five years we print it in its entirety on page 5. Read it over and then show it to the heads of the corporation you have the most influence with and see if you cannot interest them in this plan of mutual service. The corporation adds to Lehigh's endowment and Lehigh adds to the corporations intellectual equipment. We give them a staff of trained consultants who have at their disposal laboratories, a library of 150,000 volumes and an alumni body of 5000 technical men. This last asset is a big one for our staff can always turn to any one of these five thousand men for information of a special nature that this man may possess and it will be gladly given. Surely a retaining fee of \$1000 a year is a small sum to pay for such a staff so splendidly equipped. Of course this retaining fee does not cover work actually undertaken by our staff but merely the preliminary conferences and investigations that will determine where and in what way the work the corporation has in mind had best be done. Doubtless at times the University will be able to inform the corporation that the information they desire to develop is already in existence and save them expense by designating where this knowledge is to be obtained.

In case a corporation feels no need for retaining the services of any technical institution it may at least feel its responsibility in fostering technical education so that its supply of engineers may be constant and of high quality. This supply as it comes from the college is semi-finished material and is the only material which industry does not have to spend money to obtain. Ordinary and skilled labor is trained in the industries and at their cost. Engineers get their fundamental training without any present cost to industry. Many corporations are beginning to feel the need of protecting and fostering this source of supply but are estopped from giving to colleges because their legal talent advise them that stockholders might be able to hold directors personally accountable if there is no *quid pro quo*. This contract establishes a legal reason for the appropriation and removes the above objection. The time will come, and that shortly, when industry generally (and legal talent too) will recognize that they get a direct return from all money spent on colleges in the trained thinkers they draw from this source.

The Alumni Drive

Of course, when all is said and done the real source of aid to colleges was, is, and ever shall be their alumni. Our alumni have already pledged over a million and a half (see page 7). The average gift is \$833, which proves conclusively that some mighty high grade canvassing was done. But the number of subscribers, which is less than 1900, proves with equal conclusiveness that the canvassing is far from complete. Missing as I did on the list of subscribers the names of hundreds of men who I knew were absolutely to be counted on I had an elaborate check made to determine just how many active members of the Alumni Association there were in each district who had as yet not subscribed. We found a total of 1363! Of this number 510 were men who had subscribed to the Memorial Fund. A large proportion were older men who are always found in the forefront of any movement to benefit Lehigh. To say we were astonished is to put it mildly. Of course we knew some canvassers had fallen down completely but we had no notion that such a large list of good prospects were still available. Every effort will be made to reach each one of these men during the next two months and the result should be a fifty per cent increase in the number of subscriptions.

ARTICLES OF AGREEMENT, between Lehigh University, of Bethlehem, Pennsylvania, a corporation established by an Act of the Legislature of the State of Pennsylvania on the ninth day of February, 1866, Party of the First Part, hereinafter designated as the University, and

 of, a Company incorporated under the Laws of the State of, hereinafter designated as the Company, Party of the Second Part.

IN CONSIDERATION of the contemplated service, as hereinafter described, to be rendered to the Company by the University, the Company agrees to pay to the University a retainer in the sum of Dollars (\$.....), in five equal annual installments of Dollars (\$.....), payable on the day of in the years,,,, without interest.

The University agrees:

1. To permit accredited representatives of the Company to use its Library.
2. To advise the Company about the personal and professional qualifications of Lehigh alumni whom the Company may desire to consider for permanent employment, or for consultation regarding the solution of special problems or other technical service.
3. To advise the Company about the qualifications of undergraduate students who will be available for employment upon graduation; and to arrange for interviews between accredited representatives of the Company and these students.
4. To arrange for preliminary conferences between accredited representatives of the Company and members of the staff of the University on problems pertaining to the business of the Company; provided, however, that when the Company requires extended service, including consultation, or investigations, or tests or research work, the University will:
 - a. Advise the Company where such service may best be obtained.
 - b. When, in the opinion of the University, the service may properly or advantageously be undertaken by its staff and in its laboratories, arrange for these services for a charge which shall cover the fee to be paid by the University to the member or members of its staff to whom the work is assigned, the salaries of temporary employees and the wages of mechanics and laborers employed on the work, the cost of materials and supplies consumed and of special equipment purchased or constructed for the work, and an allowance for general expenses and "overhead," all of which, so far as possible, shall be mutually agreed upon by the Company and the University before the work is undertaken.

This agreement is effective and binding upon each of the parties subscribing thereto, beginning on day of A.D., and continuing for five calendar years terminating on day of, A.D.

Attest:

.....

Attest:

.....

LEHIGH UNIVERSITY,

By
 Secretary for the Board of Trustees
 (Acting by authorization of the Board of Trustees)

By

Another interesting and encouraging thing we discovered was that several hundred of our subscribers had never before evinced any interest in Lehigh. Over a hundred were not even on the official class lists, showing the classes had never been able to get them to answer a letter. Before we get finished hundreds more of the men who have almost forgotten Lehigh will have had their interest re-aroused and be back in the fold. How I love to recover these "lost sheep." "There is more joy in Heaven over one sinner who repenteth than over ninety and nine righteous men" (there's another misquotation for you).

To sum up, we are ready now for the big job of reaching 3000 subscribers and \$3,000,000 by June. "Come over to Macedonia and help us."

MILES ROCK, C.E., '69

Life Story of a Graduate of Lehigh's First Class FIRST PRESIDENT OF LEHIGH ALUMNI ASSOCIATION

Miles Rock, one of Lehigh University's first and foremost sons and a noted scientist, died in February, 1901, in Guatemala.

Fresh from service as a Pennsylvania volunteer in the Civil War, Miles Rock was one of the three young men who made up the first class that entered the splendid institution founded by Asa Pack-er when it was opened in September, 1866. One of the three, J. Haynes Hind Corbin, A.C., preceded Mr. Rock to the grave. The other was Charles Edward Ronaldson, M.E., who died some years ago.

On June 24, 1869, when the class of '69 graduated, Miles Rock received his diploma as a Civil Engineer. It was the first commencement day at Lehigh and Christmas Hall, where the exercises were held was crowded. The subject of Mr. Rock's oration was "Forest Trees." "The Times" of the following day, in its account of the commencement, said, speaking of Mr. Rock's address: "He evinced much knowledge of his subject, which was considered in its physical, moral and scientific bearings. Mr. Rock gave a very careful examination of the different trees in the University Park. He was heartily cheered by his fellow students, with whom he appeared to be very popular. There was much originality in his address, which was the novelty of the day."

During his Senior year at college Mr. Rock was instructor in mathematics and drawing and the year following his graduation he spent at the University as instructor in mineralogy and geology.

He was born in Ephrata, Lancaster County, on October 10, 1840, and attended the local and Lancaster schools, where he prepared for Franklin and Marshall College. He was a student at the latter college when the Civil War broke out, but he gave up his studies and went to the front at the outbreak of the war. He served until the war closed and then decided not to return to Franklin and Marshall, but to enter the new University that the great philanthropist of the Lehigh

Valley had just founded in South Bethlehem.

In 1870 he married Miss Susan Clarkson, and went to the observatory at Cordova, Argentine Republic, as astronomical assistant to Dr. B. A. Gould. He remained in Cordova for three years, mapping the stars of the Southern heavens. From 1874 to 1877 he was employed by the United States hydrographic office, determining latitude and longitude in the West Indies and Central America. In 1878 he was an assistant on the Wheeler survey west of the 100th meridian, determining latitude and longitude. From 1879 to 1883 he as assistant astronomer at the United States Naval Observatory at Washington, and observed the transit of Venus at Santiago in 1882.

From 1883 to 1898 Mr. Rock was the head of the Guatemala Commission to determine the boundary between Guatemala and Mexico. It was due to his knowledge, his determination and pluck that Guatemala secured its substantial rights, as Mexico was several times at the point of war in order to force the smaller republic to yield certain tracts of land which were clearly Guatemala's by treaty and occupancy. Mr. Rock's worth was highly regarded by the Guatemala authorities, and in the development of the resources of the Republic Mr. Rock took a deep interest. After his official work was over he spent much time in Guatemala since 1898 in looking after his private interests in that country.

Mr. Rock always took a devoted interest in his alma mater. In April, 1870, when a meeting was held at H. C. Corbin's office, in Philadelphia, to form an Alumni Association, Mr. Rock was chosen its first President. A few years later he was appointed one of the honorary alumni trustees. His last visit to the college campus was in 1897, when he attended the alumni reunion and made an address. He contributed largely to the collections in the scientific department of the University. He was a member of the Cosmos Club, of Washington, and also of the Washington Academy of Science.

ENDOWMENT CAMPAIGN

STANDING OF DISTRICTS ON JANUARY 24, 1924

DISTRICTS	No. of Lehigh Subscrip- tions	No. of Outside Donors	Amount Lehigh Subscrip- tions	Amount Outside Subscrip- tions	Total Amount Subscribed	District Quota
Upper New England.....	30	.....	\$ 23,435	.....	\$ 23,435	\$ 50,000
Lower New England.....	30	1	18,085	\$ 500	18,585	50,000
Central New York.....	14	1	5,808	100	5,908	25,000
New York Metropolitan.....	312	10	374,786	2,065	376,851	574,000
Buffalo and Erie.....	73	7	25,930	6,250	32,180	50,000
Northern New York.....	29	.....	12,112	.....	12,112	30,000
Central New Jersey.....	39	9	11,965	2,850	14,815	41,000
Lehigh Home Club.....	219	.....	311,814	.....	} 362,323	476,000
Bethlehem Local .....	.....	270	.....	50,509		
Reading	27	.....	7,255	.....	7,255	40,000
Philadelphia and Delaware.....	250	10	154,060	4,575	158,635	393,000
Pittsburgh	298	12	401,186	62,250	463,436	*650,000
Central Pennsylvania	93	3	26,470	650	27,120	150,000
Northeastern Pennsylvania	65	26	26,925	6,858	33,783	141,000
Southern Anthracite	37	26	8,492	5,550	14,042	25,000
Maryland	62	.....	37,950	.....	37,950	134,000
Washington, D.C., and Virginia.....	55	1	13,565	25	13,590	80,000
Northern Michigan	7	.....	3,850	.....	3,850	10,000
Southern Michigan and Toledo.....	24	.....	9,930	.....	9,930	40,000
Northern Ohio	48	3	20,145	700	20,845	80,000
Chicago and Middle West.....	59	.....	27,755	.....	27,755	81,000
Missouri	2	.....	250	.....	250	.....
Louisiana and Mississippi.....	4	.....	850	.....	850	.....
North and South Carolina.....	9	.....	2,805	.....	2,805	.....
Tennessee	3	.....	1,350	.....	1,350	.....
Kentucky	8	.....	2,030	.....	2,030	.....
West Virginia	14	.....	6,635	.....	6,635	.....
Washington	4	.....	1,425	.....	1,425	.....
Oregon	3	.....	1,400	.....	1,400	.....
Southern California	3	.....	600	.....	600	.....
Northern California	3	.....	1,900	.....	1,900	.....
Utah	3	.....	800	.....	800	.....
Arizona	5	.....	226	.....	226	.....
Texas	8	.....	1,850	.....	1,850	.....
Wyoming	1	.....	200	.....	200	.....
Nebraska	3	.....	1,020	.....	1,020	.....
Kansas	1	.....	200	.....	200	.....
Minnesota	5	.....	1,200	.....	1,200	.....
Colorado	3	.....	110	.....	110	.....
Cuba	1	.....	100	.....	100	.....
European Countries	1	.....	1,000	.....	1,000	.....
Idaho	2	.....	75	.....	75	.....
Canada	1	.....	400	.....	400	.....
Arkansas	5	.....	1,000	.....	1,000	.....
Nevada	1	.....	500	.....	500	.....
Scattering	4	.....	326	.....	326	.....
TOTALS	1868	379	\$1,549,770	\$142,882	\$1,692,652	
Rockefeller and Carnegie Foundations					500,000	
GRAND TOTAL					\$2,192,652	

* Pittsburgh's quota was originally \$315,000 but they generously agreed to attempt to raise more than double their quota.

REPORT OF LEHIGH MEMORIAL FUND

JANUARY 1, 1924

SUBSCRIBED—

1st Subscription	\$373,287.00
2nd Subscription	51,496.80
Non-Lehigh	4,615.00

\$429,398.80

UNPAID—

Collectable:

1st Subscription	\$ 41,386.92
2nd Subscription	9,380.00
Non-Lehigh	510.00

\$51,276.92

Non-Collectable:

Deaths	\$ 2,490.00
Cancelled	2,369.75

4,859.75

56,136.67

PAID— \$373,262.13

Look these figures over and then consider that to finish the work now contracted for we need \$20,000 more than we have in the bank and you will understand why we are making such an effort to collect the balance due on subscriptions.

However, it is not in my nature to be pessimistic and I have no doubt this needed \$20,000 will be rapidly forthcoming. What worries me is that we need every cent of the \$51,276.92 which is still unpaid. After the contracts now let are completed there is the grading, topsoil and seeding of that part of the campus to be done; new walks and roads to be constructed; furniture, mantels and lighting fixtures to be installed before the building is ready for occupancy. If every dollar is paid that was subscribed we could, by the exercise of severe economy, just about do these things.

But—suppose that it is not all paid, what then? We have created a wonderfully beautiful building. There is nothing like it in this section of the country. Are we going to turn it over without giving it the proper setting within and without? Would you buy a splendid jewel for a gift to one you love, set it in silver, hang it on a nickel-plated chain and mail it in a shoe box wrapped in old newspapers? I opine not. It would have a setting and a casket worthy of its value and beauty.

For very pride's sake let us finish this job in a way that is worthy of its inspired conception, its enthusiastic development, its beautiful realization—and above all, worthy of the boys whose deaths it commemorates.

There will be no further solicitations of subscriptions. But surely we can hope that that term "Second Subscription" will bring to the mind of many that two years ago a number of men increased their subscriptions 50%. Only through this generosity was this building made possible. Perhaps there are others whose deep interest in completing this Memorial will lead them to "match" these chaps who led the way. And certainly every man who made his pledge in good faith will complete his payment at no matter what sacrifice.

At any rate, boys, there is the story. Plain, hard facts that I have been looking at until my head—yes, and my heart—aches. Of course it will be finished and it will stand as the jewel in Lehigh's crown for ages to come. But let us finish it worthily and in a way that will enable us to take a just pride in ourselves as we gaze this June on its soul-satisfying beauty.

NEW ATHLETIC POLICY PROPOSED.

ALUMNI ASSOCIATION TO SUBMIT RECOMMENDATIONS TO BOARD OF TRUSTEES.

Minutes of the Mid-winter Meeting of the Board of Directors of the Alumni Association of the Lehigh University, Inc., Held in Drown Hall, Bethlehem, Pa., January 11, 1924

The meeting was called to order at 7:30 p.m., by President Hudson, with the following members present: C. W. Hudson, '89; W. C. Dickerman, '96; Taylor Allderdice, '83; Aubrey Weymouth, '94; A. C. Dodson, '00; H. A. White, '95; Timothy Burns, '01; P. A. Lambert, '83; J. A. Frick, '03; Walter R. Okeson, '95, and A. E. Buchanan, Jr., '18.

Athletic Situation The President called attention to the fact that at the meeting last June the retiring President, H. D. Wilson, had at the instance of the Board appointed a sub-committee to confer with the Alumni Committee on Athletics. The meeting was held and the Chairman of the Alumni Committee on Athletics, D. M. Petty, '09, was asked to prepare a report covering the present composition and functioning of the "Lehigh University Athletic Committee," with comment on our present coaching and business methods and with suggestions as to the improving of the quality of our athletic teams, while adhering strictly to the policy of offering no illegitimate or underhand inducements to secure better material for these teams. This report the President said he would have the Secretary read later, but first would ask for the reading of some of the letters which various alumni have been writing on the subject of athletics.

The Secretary then read some of the above-mentioned letters and it was quite evident that there was a strong sentiment in favor of the subject of athletics being given immediate consideration by the governing body of the Alumni Association. The question was asked by Weymouth, '94, as to whether the alumni representatives on the athletic committee stood together when important questions of policy were considered. He was answered by Burns, '01, a former member of the Athletic Committee, that they did not and he could remember one occasion quite clearly when through division a matter of high import was decided in a way that displeased the major part of the alumni body. The President expressed himself as astonished to find that the alumni members who were elect-

ed as representatives of the alumni body should not reflect its sentiment and stand together in all matters of importance. Secretary Okeson pointed out that the alumni members would be much more apt to do this if the Association, through action by the Board of Directors and by the Alumni Council, were to agree on a definite policy and elect their representatives for the known purpose of carrying out such a policy.

Allderdice, '83, was of the opinion that the alumni should withdraw from all participation in athletic management unless they were ready to formulate a forward-looking policy and work for its adoption. Dickerman, '96, called attention to the fact that the undergraduate members of the Athletic Committee served but for a year and unless either the faculty or the alumni members saw to it no continuing policy would be carried out. Lambert, '83, stated that the faculty had not been deeply interested in athletics in recent years due to the fact that they felt the management had been largely assumed by the Trustees. At any rate his own interest had not been as great as formerly.

The President then ordered the reading of the report from D. M. Petty, '09, Chairman of the Alumni Committee on Athletics.

Report to Board of Directors of Alumni Association. Athletic Situation at Lehigh University

In accordance with instructions from President Wilson, given at the informal Committee meeting held Alumni Day, we have investigated the present operation of the Athletic Committee and Department of Physical Education.

We find that the regulation and organization of the Athletic Committee is fully covered in the By-Laws and resolutions dated June 26th, 1919, and formally adopted by the Trustees on June 27th, 1919. This provides for the exclusive control of the athletic grounds and the absolute and exclusive control and direction of all the athletic interests and contests of the University is hereby placed in the hands of a committee to be known as "The Lehigh University Athletic Commit-

tee." The personnel of this Committee is as follows:

One member of the Board of Trustees to be chosen by the Trustees.

The President of the University.

The Professor of Physical Education.

Two additional members of the Faculty.

Two faculty members together with the Professor of Physical Education shall be known as the Faculty Members.

Four Alumni.

Five undergraduate members, three to be elected in the second term of each year prior to Commencement by the Senior, Junior and Sophomore classes, one by the College-at-large from nominees of the two upper classes and Sophomore class; the fifth member shall be the President of the Senior class.

Special attention should be called to the following clause: "This Committee (subject to the Board of Trustees and in conference with the Faculty), shall direct the policy of the University in all athletic matters, *and it alone* shall have the power to say what teams, and in individual contests, what individuals, shall represent Lehigh. *It or those whom it may designate, shall alone have authority to solicit subscriptions FOR THE SUPPORT OF ATHLETICS AT LEHIGH.*"

DEPARTMENT OF PHYSICAL EDUCATION

"The aim of the Department of Physical Education is to insure the health and physical development of every student of the University. Exceptional facilities for accomplishing this aim are afforded in Taylor Gymnasium, field house and the two playing levels of Taylor Field."

"Each student, upon entering the University, is given a physical examination by the Department and also a medical examination by the consulting physician. He receives a plotted card showing his relation to the normal student and he is advised as to postural and physical defects. A second physical examination later is offered, to afford evidence of improved condition."

"All students are required to take regular exercise under Department supervision. This requirement calls for two hours a week in the gymnasium, or participation, under the oversight of the Director, in one of the following organized sports: football, cross country running, basketball, wrestling, swimming, soccer, track, lacrosse, tennis and baseball. Members of the R. O. T. C. unit may substitute one hour of military drill for one of the two hours of required gymnasium."

The above is taken from Register.

As far as this Committee knows the regulations as applying to the Athletic Committee are now being followed out, but on the other hand we do not know that the physical examination No. 1 or 2 or a

plotted card is given to each student as he enters the University.

A short summary of the situation is:

1. Students are permitted to substitute competition for a position on any of the authorized athletic teams for a credit in physical education.
2. The Athletic Committee engages coaches for the specific job of coaching a particular team or the same man may engage to coach more than one team. It seems that when the contract is so drawn, that while the coach may remain in Bethlehem for the full scheduled year, he has no duties to perform except when the particular teams he is supposed to be coaching are engaging in inter-collegiate competition or preparing for such competition.
3. Members of the various athletic teams are all from the Student Body, and for the purpose of this discussion may be divided into two classes:
 - (a) Those who come to the University of their own initiative.
 - (b) Those whose attendance at Lehigh is the result of alumni or undergraduate persuasion and influence.

In football the majority of the varsity players fall into the class of those who have been sought after, because of their ability along this line. Baseball, the division is more nearly equal; Basketball has approximately the same status as baseball. All other sports, the majority of varsity players is made up of those men who come to the University of their own initiative.

The success of our athletic teams would seem to depend on having seasoned players on the teams. These players may be seasoned before they come to Lehigh or seasoned at Lehigh. An examination of the personnel of our successful teams, particularly of our most successful players, will show that the vast majority of these men did not become stars until after they have been in the University for one and in some cases two years, and that their best work was performed on their particular team in their third and fourth years. There are exceptions, of course, to this statement, but as a whole it will be found that the backbone of our successful teams has been made up of men who have been in the University more than one year. Therefore, to improve the standing of our athletic teams, the first problem to be considered is, how to hold men in college for four years. As a secondary problem in the same class we should consider ways and means whereby green material in the form of freshmen may be taught the rudiments of the particular sport for which they are mentally adapted, and that this instruction should continue throughout the year rather than merely throughout the season of that particular sport.

THE IDEAL DEVELOPMENT OF ATHLETIC TEAMS

All freshmen should be examined in the Department of Physical Education. Those who have had experience in some sport and express a desire to continue that experience, or who have the physical and mental qualifications and express the desire to learn a particular sport should be given the opportunity of not only learning this sport, but of first participating in such a sport in the form of intra-mural competition and later in the form of intercollegiate competition.

In order to set up this ideal arrangement, the Department of Physical Education should work very closely with the newly established Department of Health Service. Jointly these two Departments should interview and examine all freshmen in order to determine what sports they are particularly qualified for. In line with corrective athletics, certain sports should be recommended to these men in order to best promote their physical welfare.

Classes in the various sports such as football, baseball, etc., should be run almost continuously throughout the college year. In football, punting, drop and placement kicking, forward passing, both throwing and receiving, should be taught not only throughout the football season, but throughout the remainder of the college year. The other sports could be handled in the same manner. A suggested outline of sport classes could be somewhat as follows:

During the months September, October and November, classes could be conducted in track, lacrosse, baseball. During the months of December, January and February, classes could be run in track, swimming, tennis, football. During the months of March, April, May and June classes could be run in baseball, football, lacrosse and swimming.

It will be noted in the above program that each sport has a first and second class, thus giving each boy a chance to take two courses in any one sport or in different sports. It should be borne in mind that it is not necessary to have a large class in any one sport, in fact it would be better to have the classes small. This is entirely practical owing to the fact that a small group of men may be able to take instructions for, say one hour or even less during the morning, another group at some other hour, in fact there is no reason why instruction should not be carried on almost every hour during the day. The student could then report for these classes at whatever time their roster permitted. This arrangement has the advantage that classes could be small and that instructors could be employed to best advantage, that is, they could be kept busy for a reasonable portion of a day. We would then be using our athletic facilities to better advantage than if all athletic instruction was given after 4:00 p.m., as is the present practice.

The effect of such a series of classes in athletic sports on the athletic teams which of course work only in season would seem to us to be summed up in the following:

1. A large reservoir of constantly improving material would be available to draw from.
2. The squads for the varsity teams could be kept down to such a point that it would not be a burden to handle, and yet a large number of men would be continuously receiving training in the various sports.
3. It would be possible without seriously handicapping any particular sport to limit the men to say, two sports so far as intercollegiate competition is concerned, it being understood that intercollegiate competition is the only form of athletics which can be said to interfere with scholastic standing.

One of the first obstacles which may appear to the teaching of the various sports in the Department of Physical Education is that of instructors. It should be noted, however, that in the major sports at least, classes could be arranged in the majority of cases in the off-season period, that is, in football for instance, the classes would be started after Thanksgiving. It should be possible, therefore, to not only secure instructors cheaply from outside the campus, but a certain number of the Senior varsity men could be used as instructors. In baseball the off-season classes can be taught by men from the professional baseball ranks who are usually very glad to pick up a job which will enable them to cover their bare living expenses. Of course, the general plan of instruction should be laid down in a rather definite manner so that all pupils in the classes would secure more or less the same instruction.

It seems that, in reference to the Athletic Committee, it would be better if the undergraduate representatives were managers of various sports rather than an athlete who may be engaged in those sports, because one of the principal duties of the Athletic Committee is to see that the finances are in proper condition. It would also seem that, with the above suggested work for the Department of Physical Education, that the Athletic Committee should provide a graduate manager who should be Chairman of the Athletic Committee, and who should hold the majority of the responsibility for the financial condition of all of the Athletic Committee operations. This responsibility might be shared with a small Executive Committee of the Athletic Committee made up, for instance, of one Faculty Member, one Alumnus, together with the managers of the two major sports.

Before an organization is effected, it would be well to investigate with as much detail as possible, the present work-

ings of the graduate manager idea as worked out in some of the other colleges and universities. In general, it would seem that the function of a graduate manager along with the Athletic Committee to operate that portion of athletics concerned with intercollegiate competition, while the Department of Physical Education should be the training school for all athletes, that is, they should develop men as far as possible and then divert them, or at least those that appeared to best advantage, to the coaches of the various sports who are employees of the Athletic Committee and who work directly under the Graduate Manager.

Coaches who are employed by the Athletic Committee may be employed in the Department of Physical Education during the off season period to teach certain classes.

The idea of teaching sports instead of having gym classes only has been developed, to some extent at least, at West Point where every student is expected to learn the rudiments of all branches of sports. At Lehigh we should at least give every student the opportunity of learning the rudiments of several sports, this is not only better physical exercise but better mental training.

Respectfully submitted:
Alumni Committee on Athletics,
D. M. Petty, Chairman.

In the discussion that followed the reading of this report the opinion was advanced by Frick, '03, that the carrying out of the plan outlined therein would be very expensive. He acknowledged that it should prove most effective if put into operation and carefully carried out. But he felt that it was probably too much of a step to take at once. White, '95, suggested that it might be adopted as the frame-work on which to build or as an ideal to work for. The President felt that it certainly "would give us something to shoot at."

On motion the report was received and ordered spread on the minutes.

Dodson, '00, felt that a step in the right direction would be to relieve the Department of Physical Education of the work of buying supplies for athletic teams and have that done by the University, just as it does for all other departments. Okeson replied that this would not give much relief to the Department as it would have to prepare advance requisitions showing the character of the supplies and where they were to be bought to the best advantage. Also, much "rush" material has to be ordered during a season. If a graduate manager existed he would relieve the Department of Physical Education of all such work.

The sentiment expressed finally crystallized into the following resolution, which was adopted unanimously:

WHEREAS, In our opinion the success of Lehigh's athletic teams is not commensurate with the material available for such teams in our student body, now be it

RESOLVED, That we recommend to the Board of Trustees of Lehigh University the reorganization of the Athletic Committee and the reframing of the rules governing this Committee and that as part of that organization the position of Graduate Manager be created, his duties defined and such a Graduate Manager be secured, and be it further

RESOLVED, That a copy of the report of the Alumni Committee on Athletics be sent to the Board of Trustees for their information.

Endowment Collection Costs The question of financing the collection of the subscriptions to Endowment was taken up next. In the opinion of Dickerman, '96, the Executive Chairman of the Joint Committee, this is unquestionably a proper charge to be met by the University, even though the Alumni Office be used as a medium to make such collections. He therefore moved that:

It is the sense of this Board that the expenses incurred in the collection of Endowment subscriptions is a proper charge against the University, but that the work of such collection can best be done by the Alumni Office.

This was carried and the Secretary instructed to inform the Trustees of this opinion of the Directors of the Alumni Association.

Nominations For Alumni Officers It was next considered whether the time had arrived for the selection of

two tickets instead of one by the Nominating Committee. The opinion prevailed that candidates of the proper calibre could not be found who would be willing to stand for election in a contest. Nevertheless there was a feeling that something should be done to enable the membership of the Association to have a greater say in selection of the officers and directors. It was pointed out that any twenty members could, under the By-Laws, put a ticket in nomination at any time up to sixty days before election. However, it was recognized that such action would hardly be taken unless there was a strong division in sentiment on some question and that this proviso, while it gave ready relief from

any Board which attempted to be self-perpetuating, did not aid much in enabling the membership to give expression to their choice for officers.

Weymouth, '94, moved that the names and addresses of the Nominating Committee be published in the January ALUMNI BULLETIN, together with a list of the offices to be filled this June and that active members of the Alumni Association be invited to send to any member of the Nominating Committee suggestions as to available and efficient men to fill any or all of these positions. Seconded and carried.

Alumni Educational Committee The question of the continuation of the Alumni Educational Committee was then discussed. This Committee has not functioned since Dr. Richards took hold at Lehigh, as it was felt that he should be unhampered in his study of conditions and his preparation of plans for the future. Nevertheless it is quite possible that such a committee might be of very real aid in studying the needs of various departments for equipment and taking steps to secure it.

It was moved by Allderdice, '83, that the present committee be discharged with thanks for their excellent work during the two years when they were actively functioning, and that the President of the Board of Directors be instructed to confer with President Richards as to the need of such a committee, and if he deems one advisable that then President Hudson is empowered to appoint a committee of the size he considers expedient. Seconded and carried.

Financing the Memorial Building Okeson, '95, Secretary of the Memorial Building Committee, presented a report showing that the work now let would require about \$120,000 to complete and that there was in the fund \$99,635 in cash and securities. The amount uncollected on pledges, after allowing for losses due to deaths and cancellations, is slightly over \$51,000. If the collections are good, sufficient money will be available to complete the building and put in the lighting fixtures and mantels which are as yet uncontracted for. But unless every dollar pledged is paid it will be impossible to either do the campus work around the building (terracing, sodding, seeding, walks and roads) or to furnish the offices of the University staff. Weymouth, '94, moved:

That the Trustees be informed that the Alumni may have no funds

for grading, building roads and walks and furnishing the Memorial Building and on account of the present Endowment Campaign, undertaken at the instance of the Board of Trustees for the betterment of Lehigh University, are prevented from attempting to raise additional funds for this Memorial; that therefore the Trustees may consider it advisable to make provision for necessary campus improvements and furnishing; and recognizing that the University has no available funds, the Alumni Association offers to loan the University any or all of its Life Membership Fund of \$30,000 at an annual interest rate of 4½%. It is suggested that provision can be made by the University for the amortization of this loan from income accruing from the alumni subscriptions to endowment.

Seconded and carried.

Alumni Employment Agency The Secretary reported that a certain amount of work was done by the Association in securing Lehigh men to fill positions reported vacant and in securing positions for alumni who desired to make a change. In this the Alumni Office cooperated with the heads of the various University Departments, all of which did considerable work in this line for their graduates. Owing to the small size of our alumni body and perhaps to their exceptional quality such requests were infrequent and it was doubted whether a more elaborate employment department would bring results that would warrant the expenditure of money such a department would entail. Nevertheless there was some demand that the Association expand its activities in this direction. After some discussion, White, '95, moved that the Association continue its present practice. Seconded and carried.

Alumni Council Meeting In discussing the date for this year's meeting of the Alumni Council it was suggested that this be left unsettled until it developed whether trustee action in the matter of athletic policy would require a meeting of the Council. In case the Alumni were asked to formulate any policy for the conduct of athletics the Council could then be summoned to discuss and take action if agreement were reached. Unless some pressing matter of this kind came to the fore it was felt that the best date for the Council meeting

would be on the Friday before Alumni Day, in June.

University Dickerman, '96, stated that in **Publicity** his opinion the publicity begun last spring should be continued. He felt that in order to realize the best results from the money the University had spent on this publicity that it would have to be continued as a regular thing. Buchanan, '18, expressed the opinion that there was a "story a day" to be found around the University and that if these were sent out regularly many would find their way into the newspapers. As the University has no funds for this purpose, Dickerman moved that the Secretary report at the next meeting of the Board what sum the Alumni Association would have available for this activity. Seconded and carried.

The Secretary asked that before adjournment he be allowed to bring a personal matter before the Board. He said he found that seven years of alumni work had taken most of the "pep" out of him and he was very tired. He would like to resign his office next June, or if the Board felt that he would not be justified in doing this he would like a vacation

during the time college is closed next summer to see if he could recover a little of his lost energy and get a better perspective than he now had. The President replied that he felt Okeson was only asking for something which he was entitled to but suggested that as he was now a University employee, as well as Secretary of the Alumni Association, he had better make sure that the Trustees were satisfied. Okeson remarked that as he did not get paid for the work he did for the University he scarcely thought the Trustees would refuse his request. All he wanted he said was favorable action by the people who hired and paid him, namely, the Board of Directors of the Alumni Association. "Tim" Burns, '01, remarked, "Well, I believe in being generous and giving a man everything he could have without asking. Therefore I move Okey be given a three months' vacation next summer to get rid of his resigning bug." Seconded and carried.

On motion the meeting adjourned sine die.

Walter R. Okeson,
Executive Secretary.

THE "LEHIGH" STAR

Discovered by Metcalf and Its Orbit Computed at Sayre Observatory

In 1876 Prof. C. L. Doolittle, Professor of Astronomy at Lehigh University, made more than one hundred determinations of the latitude of Sayre Observatory and subsequently continued these observations using the same group of stars for about fourteen years; at the end of 1890 the total number of times the latitude of the place had been determined was 1142.

In 1892 a new series of latitude determinations was begun and, for a period of four years, observations were made on practically every clear night, and 5486 determinations were made, bringing the total number to 6628.

It was about the year 1885 that Dr. Küstner, of Berlin, found that certain anomalies in astronomical work he was doing could only be accounted for by assuming that the position of the poles was a variable quantity. This was a revolutionary statement and the scientific world seeking a confirmation of this theory found the work done at the Sayre Observatory perfectly adapted to substantiate the claims of Dr. Küstner.

Dr. S. C. Chandler, an authority on theoretical astronomy and Editor of "The Astronomical Journal," of Boston, in the issue of August 23, 1892 says:

"Professor Doolittle must be regarded as a pioneer in this subject, having de-

voted himself to it years before the reality of latitude-variation was generally regarded as possible. The accuracy, homogeneity and continuity of his observations make the series the most valuable of any we possess."

As a "by-product" of the last series a determination of the astronomical "constant of aberration" can be deduced for each year's work. The earth's distance from the sun, which is the unit of astronomical measurement, is determined directly from this constant of aberration. The importance of this constant is therefore evident. For a hundred years a value of 20.44" had been regarded as classical. The results at Sayre Observatory indicated that this value should be nearer 20.52", corresponding to a greater distance from the sun by nearly 300,000 miles. This new value has been confirmed by other observatories and also by work carried on at Sayre Observatory in recent years.

Beginning in 1895, Professor Ogburn, who had been assistant astronomer at Dudley Observatory at Albany, N. Y., before coming to Lehigh, employed the equatorial telescope of Sayre Observatory in measuring the positions of a number of the minor planets or "asteroids," of which there are known to be several hun-

dred revolving about the sun in orbits lying between Mars and Jupiter, and in computing some of their orbits. This work was, in a way, routine, yet it represented a contribution to knowledge and meant that Sayre Observatory was doing its share in keeping track of the "goings on" in the heavens.

About the year 1909, Metcalf, of Taunton, Mass., had developed a method of discovery of new minor planets by means of photography and during this year added a new "asteroid" to the number then known. At this time, in looking around for a suitable subject for thesis for a candidate for the degree M.S., (Joseph B. Reynolds, Lehigh, '07, now Assoc. Professor of Mathematics at Lehigh,) Professor Ogburn asked Mr. Metcalf for the measured position (Photographically determined) of this planet (Number 691) and suggested that its orbit would be computed and therefore track of its position in its journey through space would be kept if he would extend the privilege of selecting its name. This permission was promptly given and the name LEHIGH was chosen. A planet, therefore, whose diameter is probably not more than ten miles, moving around the sun in three and one-half years at a distance of 280,000,000 miles from it, whose path is mathematically determined, which has never been seen, is named Lehigh and is so recorded in the official list of the minor planets.

In the year 1904 a new zenith telescope was presented to Lehigh by the late R. H. Sayre and a suitable building for the instrument designed by Professor C. L. Thornburg, head of the department of mathematics and astronomy, who superintended its erection, and in September, 1904, a new series of observations for latitude was begun with a two-fold object in view: 1st—To extend the work which had been carried on in a way which would make the latitude work at Sayre Observatory run through a long term of years, as the value of this particular work increases very rapidly with the number of consecutive years of determinations at any one place; 2nd—To further verify the new value which had been obtained for the "constant of aberration" when a new group of stars was employed, and with a different observer.

The results of the first year's work in this new series ending in September, 1905, was published as Vol. I, *Astronomical Papers of Lehigh University* in the year 1907. It consisted of 1207 determinations of latitude and partially confirmed the result obtained in 1892. This work was accepted by the scientists as reliable and showing the result of care and painstaking effort. Dr. Joseph Barrell, of Yale, in "American Geographic Magazine" for November, 1907, says in part: "The precision of modern astronomical work is remarkable when we find that an observer, as Professor Ogburn has done,

can locate by observation on stars the position of his instrument at Sayre Observatory within a distance of less than two feet in one night's work, and this in face of the fact that his duties as instructor in the University consume several hours a day, to which must be added the additional work of reducing the instrumental observations which takes an average of six hours computing to each hour of observation."

This work was carried on for six consecutive years with a total of 4370 determinations of latitude, when the construction of a street railway line passing within less than 100 feet of the observatory impaired the astronomical work so seriously as to make further results practically valueless from a scientific point.

For this reason the use of the observatory in the last dozen years has been necessarily restricted to instruction and to its availability for graduate students in thesis work, as well as to citizens of the town who wish to satisfy their desire to view the wonders of the heavens through a telescope.

REMINISCENCE

"Whaur Ha'e Ye Been, Curt Trafton!"

An anonymous correspondent sends me the following, headed, "96 Class Note," which he says was inspired by the account of the Brown game, and the pictures it conjured up from the past. He says he could see "Curt" Trafton and Walter Okeson raging up and down through the first half and rarin' to go in the second, "bless the joints of the old stiff,—meaning bless the stuff of the old giants." The piece is supposed to be in Scotch—as good as you can get nowadays.

And whaur ha'e ye been, Curt Trafton!
Fegs, whaur in the de'il ha'e ye been?
It's this twenty year and mair
That yer gang has missed ye sair,
A-lookin' for ye June days on the green.*

Yes, whaur ha'e ye been, Curt Trafton!
Fegs, whaur in the de'il ha'e ye been?
Wi' yer stockin' hangin' down,
On yer face the battle frown,
How ye used to dominate the chalk-lined scene!

Say, whaur ha'e ye been, Curt Trafton!
Yes, whaur? I can but repeat the same.
With old doctors Curt and Okey
To pep up a team, by hokey!
Lehigh probably would never lose a game!

Whaurever ye ha'e been, Curt Trafton,
Whaurever in the de'il ye ha'e been,
Satisfy that old class hunger—
We're none o' us growin' younger—
Let us see you, come next June, upon the GREEN*

*GREEN. Meaning the Hotel Beslem, the campus, Tom Scott's, or any other old place in the town.

CLASS GUARANTEE PLAN

TO MAKE OUR ALUMNI 100% ACTIVE AND 100% EFFICIENT

Class of 1896

Elsewhere in this issue is a poem from a '96 man. This seems to be poetry—if you can call it that—month for this class, as I am also in receipt of the following from one of its members. He says he wrote it after inspecting that Royal Baking Powder diagram showing the amount of cream of tartar supplied in the way of yearly dues and BULLETIN subscriptions.

Less than fifty per cent!
Don't wait for Sammy to call you.
Less than fifty per cent!
Don't wait for some one to bawl you.

Less than fifty per cent!
That ain't no '96 stuff.
Less than fifty per cent!
That makes a record that's rough.

Less than fifty per cent.—
Hell of a sort of refrain!
Less than fifty per cent!
Brace! ere it's published again.

Class of 1891

Here is the only class of those which have subscribed to the Guarantee Plan which crossed the finish line before the race really started. They have 84% and a high resolve to make it 100% before June. There is a reason for this remarkable early showing. Said reason is—Walter Forstall. When that most efficient class secretary read in the October BULLETIN that the classes would not be asked to do anything until January, he retorted, "None of that for '91. We start now and will be finished by January." And sure enough he has made good and he is now engaged in piling up shekels for '91's treasury. They have a credit at the present writing of \$31.25 and expect to draw on the Association for a total of \$82.25 in June. All right, '91, nothing will please us more than to send you that check.

Classes of '83, '89, '94 and '95

Here's a hot race to see who will go over the line first. '94 is leading with 73% but '83's nose is at her shoulder with 71%. '89 is coming up strong with 67% and '95 is trailing with 64%. Being a '95 man myself, I am constrained to yell, "Come on, you '95." However, yelling from the side-lines never yet won a race. It's up to the jockey, "Bob" Taylor. He lives right next door and perhaps he can hear me—"Ride him, cowboy, ride him!"

Classes of '88 and '92

Now here's a nice little dead-heat, 61% each. However, the fraction favors '88 and a close look reveals that Miner's mount is just an eye-lash in front of Davis' nag.

Mighty clever riders, these two. It will be a race worth watching.

Classes of '98 and '12

Now here's '98, last year's "Pride of the Turf." She was over the finish line in January, leading '83 by a length. She was a 100% Class in April. What is the matter this year? Here is is the 10th of January and look at her back there in the ruck, trailing with 37%. If it wasn't for '12, she would be last. What's the matter? Has that jockey, "Hank" Scovil, taken on too much weight?

As to 1912, every rail-bird is at sea. She's got form, she's got speed, she's got staying power, but she was last in the race last year and she is still trailing all the others. "Jack" Hart is all right as a jockey but he don't train his mount. Why don't you get a few good boys to help you look after that horse, "Jack"? 1912 is chuck full of live-wires. Plan a real campaign this year. You will be able to get lots of fellows to help you. But don't expect any horse to have speed, "Jack," without lots of workouts.

Classes of '90 and '03

Now here are the two original champions, '90 with only 53% and '03 with 54%. It was '90 that opened this track and gave an exhibition mile back in 1920-21. Then along came '03 and ran a trial heat in 1921-22. '90 proved the track was good and '03 showed the sport would draw a crowd. Now let's see these two old-time champs go.

Classes of '14 and '18

These three-year-olds certainly did burn up the track last year but they seem slow in rounding into form this season. 1914 led at the finish last year with 94% to 1918's mark of 89%. They are leading again with 58% to 42%. But I notice that "Buck" has opened a bank account for 1918 and I suspect he's got something up his sleeve. In other words, I think this "dog" is running under a pull. Better cast a glance over your shoulder, Walter, and be ready to "go to the bat" the moment you see "Buck" loosen those reins.

Classes of '09, '10 and '11

It's sure a case of jockeys in this race. Dave Petty never stopped using the whip from the time he left the starting post and came under the wire a winner last year. Myrl Jacobs rode his mount at a steady pace, hoping to wear the other two down, but he couldn't catch '09 and '11 came up from behind and passed him at the finish under the brilliant riding of "Don" Lowry, who apparently didn't know there was a race until he reached the home stretch. To-day Dave is riding hard again and '09 leads

CLASS GUARANTEE PLAN

STANDING OF CLASSES, JANUARY 10, 1924

SCALE					Members with Addresses	Paid 1923-24 Dues	Paid 1923-24 Bulletin Subscription	Percentage to Jan. 10, 1924
0	25%	50%	75%	100%				
1869					1	0	0	0
1870					3	1	1	33
1871					3	2	2	67
1872					2	0	0	0
1873					3	1	1	33
1874					4	3	3	75
1875					8	3	3	37
1876					12	5	5	42
1877					9	4	4	44
1878					10	8	8	80
1879					7	4	4	56
1880					9	3	3	33
1881					4	2	1	43
1882					6	4	4	67
1883					26	19	17	71
1884					19	11	11	60
1885					22	9	10	42
1886					35	18	15	49
1887					45	27	24	58
1888					60	37	36	61
1889					55	36	35	67
1890					64	35	32	53
1891					47	40	39	84
1892					43	27	24	61
1893					77	39	35	50
1894					67	49	48	73
1895					107	70	66	64
1896					102	50	47	48
1897					75	41	38	54
1898					91	36	33	37
1899					45	22	21	48
1900					64	27	25	41
1901					62	34	30	53
1902					47	18	17	38
1903					92	50	49	54
1904					99	54	51	53
1905					117	57	55	48
1906					115	55	54	48
1907					121	63	62	52
1908					139	55	52	39
1909					131	63	63	48
1910					148	66	64	44
1911					126	49	49	39
1912					127	45	44	35
1913					139	58	57	41
1914					127	73	74	58
1915					126	55	57	44
1916					137	64	62	46
1917					172	73	70	42
1918					133	62	62	46
1919					156	79	78	50
1920					182	82	83	45
1921					163	85	84	52
1922					217	95	92	43
1923					325	152	150	46
					4326	2120	2050	49

with 48%; '10 is second with 44% and '11 is last with 39%. But watch that chap Lowry. You've got to have a long start if he takes a notion to ride now instead of waiting until May.

Classes of '19, '20, '21, '22 and '23

Here is the maiden class, but '22 and '23 are carrying too much weight for their age. Both of them will doubtless clear up their class lists later on this year and the lightening of weight will add to their speed at the finish. '21 is leading this race at present, with 52%. '19 is second, with 50%. I want to say right here that this horse has lots more speed than she used to

have. Watch her! '23 is third, with 46% (152 members. Only six more and she will hold the record for the largest number of active members ever enrolled in the Association). '20 is fourth, with 45%. (But, Gosh! a man can't start a law practice, get engaged to be married and ride races all at one and the same time. Here's good luck to you, "Merce.") Last, but not least, is '22, with 43%. But that's entirely due to about fifty members their jockey, "Bill" Little, says they don't want to carry. Trouble is, "Bill," I don't know which ones these are. You tell me.

(Continued in our next.)

"SAUERKRAUT AND KINKS"

*"The time has come, the walrus said,
To talk of many things,
Of shoes—and ships—and sealing wax—
Of cabbages and kings."*

Pretty Proud of This One

VIRGINIA POLYTECHNIC INSTITUTE
(State Agricultural and Mechanical College)
DEPARTMENT OF MINING ENGINEERING

OTTO C. BURKHART, E.M., C.E.
Professor of Mining

Blacksburg, Va., January 5, 1924.

Mr. R. B. Swope,
3748 Huntingdon Street,
Washington, D.C.

Dear Mr. Swope:

This is a very tardy reply to your communication of early October, but it really makes very little material difference.

If great undertakings depended for finances upon the contributions from college professors, there just would not be any great undertakings. The college professor puts others in position to accumulate wealth, but he himself gets none of it. His financial life is a mere existence from month to month.

My check herewith enclosed will pay for a few pails of mortar or a couple of boards, or for the wages of a mechanic for half the time it took me to earn the amount, but it will unmistakably show that I heartily approve the project.

I am not in a position to make a subscription extending over a period of four years, but if during that time money comes to me through channels that now have no existence, you may be sure that some of it will be deflected into the Greater Lehigh Fund.

With sincere good wishes for your success in raising the amount desired, I am,
Very truly yours,

OTTO C. BURKHART,
Lehigh, '88.

Accidents Can't Stop Them

December 25, 1923.

Walter R. Okeson,
Lehigh University, Bethlehem, Pa.

Dear "Okey":

Had expected to attend the Alumni banquet at Pottsville, October 5, but October 3 I was in a smash-up and left the Cadillac I was riding in via the windshield. Result: slight loss of memory, broken cheek bone, broken nose, concussion of the brain, fractured skull and cuts, mainly on my face, requiring twenty-one (21) stitches.

The accident has been mainly responsible for my not having sent my pledge previously. Will pledge \$250.00 now and hope to give more later.

\$125 payable January 1, 1925, and
\$125 payable January 1, 1926.

I hope to pay the \$250 this year, but if not will positively pay by the dates given.

For the gang via the BULLETIN: Recent acquisitions of H. R. Randall, '23—

1 daughter—June 20, 1923.

1 job (not position)—Rhoads Contracting Company, Ashland, Pa., Anthracite Stripping and Dirt Bank Work.

1 new address—111 West Avenue, Mt. Carmel, Penna.

1 partially made over face.

Before I close I'd like to mention another matter. Have a kid brother graduating this year from Harrisburg Academy, same school that A. E. Buchanan, Jr., graduated from, I think. He has played football two years, first year left end, this year center.

I haven't seen him play, but here's what his school book has to say:

Gettysburg Academy vs. Harrisburg Academy.

"While Randall proved to be the Academy's best man."

St. James Academy vs. Harrisburg Academy.

"While Dave Randall stood out most prominently for our team."

Carlisle High School vs. Harrisburg Academy.

"Dave Randall, center, playing his last game for the Academy, scored the only touchdown when he fell on a fumble behind Carlisle's goal."

Besides football, he plays soccer, ran in the Penn. Relays, broke school record for one-half mile and won cross-country record.

I'm fairly certain he's coming to Lehigh, but a little persuasion on your part would help.

Sincerely,

(Signed) H. R. Randall, '23,
(Present address) 65 E. Dewar St.,
Shamokin, Pa.

News From Porto Rico

JUAN FREIXAS GONZALEZ

Ingeniero

P. O. Box 333

Rio Piedras, P. R.

Rio Piedras, P. R., December 22, 1923.

Dear Okey:

This is my 2nd installment of \$—, which is due December 31, according to the pledge card I sent you sometime ago.

I received a letter from Heck, '03, commissioned as campaigner for Porto Rico and Panama and Cuba. His letter was sent from Christobal (Colon), Canal Zone.

I want the BULLETIN to inform that I am still living and always the greatest Lehigh enthusiast in Porto Rico and of Porto Rico; that my address

continues the same, Rio Piedras; that I have tried at several jobs, some in my line, and others in lines correlative to mine; that at present I work with the Insular Government, with the Division of Bridge and Roads Survey, helping in the development of a vast program of road construction now under way here; that I married in June, 1922, and have a kid eight months old, the admiration of all neighbors for his weight and health, a future Lehigh booster, and lastly, that I hope to be there on time for the first reunion of my class in the coming June.

Yours for Lehigh,

FREIXAS, '19.

Carries His Life Membership Card Around the World

418 MONTGOMERY STREET
HOLLIDAYSBURG, PENNSYLVANIA

December 18, 1923.

My dear "Okey":

Please permit me to thank you for the Life Membership card of introduction as an honored (more or less) member of the Alumni Association of the Lehigh University.

It is particularly apropos that it should be received at this time and I have carefully ensconced it in a pocket case which is to accompany me in a trip around the world, as a means of identification with any other Lehigh men I may happen to meet up with in the course of my peregrinations. Also, it may be a great help if jails yawn or bandits bandit.

Barring any national or personal calamity, Mrs. Potts and I expect to slip out of New York Harbor aboard the S. S. "Resolute" on January 19, 1924, bound for Mediterranean ports and after leaving Cairo go by way of the Suez Canal to Bombay. After a trip through India we visit Burmah, Ceylon, Java, thence to Hong-Kong, and after a short stay in Shanghai, by rail to Peking, Manchuria and Corea, and finally, if Lady Luck still smiles, arrive in Japan. Thence to Guam, the South Sea Islands and home by way of the Panama Canal to New York, where we are scheduled to arrive about June 1, 1924.

If the money is not too quickly dissipated and postal cards are available I shall use all effort to remember you occasionally.

Anyhow, here's hoping the best of the Christmas season to you and yours.

Sincerely,

"STEVE" POTTS, '94.

More "Things of the Spirit"

545 N. Exeter St.,
Baltimore, Md.,

January 9, 1924.

My dear Okey:

First let me say that DeSchweinitz's letter in the November BULLETIN stressed the point that I pondered over in trying to decide what I should give to the Lehigh Endowment Fund, and the letter and your reply interested me very much. Have always felt that an educated man is worth to society more or less according as he directs those energies—for good or bad—and I wondered if I was doing the best I could with the little I could spare, toward making citizens of character and strength who would put the stress upon the things in life that count most. Of course our ideas of what constitutes real value change as we weather the stress of life, but have felt that the fellow was right who said the things in life that count most are things that cannot be counted. I cannot recall any University activity that laid any special emphasis on the "value of character or spiritual strength" while I was in college and have been hoping that this had changed somewhat. Everyone admires a capable and farsighted engineer but if he is a man who stands foursquare for the development of character and fair play we believe his impress will be largely enhanced and his worthwhileness will be known farther and remembered longer. Am glad to hear you say that the new President feels that emphasis should be placed upon this important side of education.

Sincerely,

LAWRENCE WOODEN, '98.

Not Dead, Hicks, But Sleeping

January 12, 1924.

Dear Okey:

Here is my "second section." Was just a little bit disappointed at the figures in the December BULLETIN—particularly those of Philadelphia. But every fellow I have spoken to—and I meet quite a few—has made a pledge, so the dead ones must all be under cover.

Hope to be able to send some more for the Memorial Fund during the spring.

Sincerely,

R. C. HICKS, '21.

A SUGGESTION

Lehigh Alumni Association,
Lehigh University, Bethlehem, Pa.

Gentlemen:

The following discourse is only a suggestion, and may or may not be published in the next edition of the ALUMNI BULLETIN as you see fit.

On November 24th of last year three big gridiron battles took place, namely, Yale-Harvard, Army-Navy, and last but not least Lehigh-Lafayette.

Lehigh-Lafayette games have been occurring annually as far back as I can remember, and in accordance with custom the games have been played alternately on each others field. This condition was perfectly satisfactory in the olden days, but today the question arises as to suitable accommodations on either field.

Unquestionably all of the alumni of both colleges are not satisfied with the seats they have been able to procure for the big game, and of course it is no fault of the Alumni Association either, because there are just so many good seats to be had and that's all.

Now comes the suggestion. Every year Franklin Field is to be had the Saturday before Thanksgiving, as Penn rests up prior to the Penn-Cornell game. Previously the Army-Navy game was played on this date, and this year Delaware and Dickinson have seized the opportunity.

Now here's the point! Why couldn't Lehigh and Lafayette play their big game of the year at Franklin Field on this date?

Of course there are disadvantages, but on the other hand there are some big advantages. The game would certainly draw big in Philadelphia on a par with the Army-Navy games previously held here. In addition there would be plenty of seats between the 20-yard lines to suit both alumni, and that's a gigantic asset. Furthermore I believe that financially the affair would be a huge success, as witness the crowds that have seen games at Franklin Field this year.

Believe me, I am for Lehigh heart and soul no matter where the game is played, but if you think the idea worthy of consideration, kindly publish this letter so we can have a little discussion on the subject.

Yours for Lehigh always,

A Lehigh Alumnus.

COLLEGE AND ALUMNI NEWS

ALUMNI COMMITTEE ON ATHLETICS

Have you, Mr. Lehigh man of all classes, in all communities, spoken to that star athlete on your high school team about entering Lehigh in the Fall of 1924? You know it's the style to do this kind of a thing now. You may do this boy a great favor by speaking to him now. Not only will you be starting him to the best University, but you may save him from being turned down on account of being short one credit that he could make up in the Spring term if he knew it in time. Look this boy up now, check up the credits that he will have next Spring and write to the Dean to find out if this is sufficient for entering Lehigh.

There is another thing which this move of yours may do. I'll give you one guess as to what this is. Think it over.

In our report which we sent out in pamphlet form last Spring, we stated that we would never beat Lafayette unless everybody helps. Your individual part is to see that the boys from your town enter Lehigh, particularly those boys who are good athletes. Remember this, that Mallory, the best man Yale had this year, could not make his High School team. We have had lots of men at Lehigh who were never stars in their high school days, yet they made our Lehigh teams. So don't overlook these good prospects, along with the stars, of your high school team.

If you want the Alumni Committee to help you in any way, please call on us, but by all means be sure to tell us who is coming from your town.

D. M. PETTY,

Chairman, Alumni Committee on Athletics.

JACK STORER ELECTED FOOTBALL CAPTAIN

John W. Storer, '25, was unanimously elected captain of the football team for the season of 1924. Storer is Lehigh's triple threat man and his kicking, passing and running has been the backbone of Lehigh's offense this year. Jack made the team in his Freshman year and has played steadily ever since, except during the wind-up of last season when due to a serious injury in the Colgate game he was unable to play in the final games. This year he has been going "great guns." Always a good passer and a long kicker, this season he added brilliant open-field running to his repertoire and amazed us all with his consistent brilliancy of play. He capped the climax in the Brown game with work that marked him as one of the season's best.

Jack comes from Wheeling, W. Va., and prepared for Lehigh at Mercersburg Academy. He is a Junior at college and a member of the Kappa Sigma fraternity.

THE 1924 FOOTBALL SCHEDULE

We will all be sorry to note the absence of Brown on next year's schedule but will welcome the return of Princeton. Brown and Lehigh were unable to agree on any mutually satisfactory date, but

parted company on the understanding they would make every effort to meet in 1925. Carnegie Tech. is also absent from next year's list. Our contract with them gave them the option of playing in Bethlehem either in 1924 or 1925 and they choose the latter year. Bucknell wanted a two year contract and Lehigh, with an eye on the Brown and Carnegie Tech. games in 1925, desired a one year contract only, so no agreement was reached and Holy Cross replaces Bucknell. Syracuse offered us the same date later given to Holy Cross but Professor Reiter thought the Syracuse game too hard a one. Dickinson replaces Fordham and Villanova takes Alfred University's place on the Saturday preceding the Lafayette game.

- Oct. 4—Gettysburg, at home.
- Oct. 11—Princeton, at Princeton.
- Oct. 18—Dickinson, at home.
- Oct. 25—Rutgers, at home.
- Nov. 1—Muhlenberg, at home.
- Nov. 8—Holy Cross, at Worcester.
- Nov. 15—Villanova, at home.
- *Nov. 22—Lafayette at ?

* Lehigh has proposed to Lafayette that the game be played in Bethlehem or else on Franklin Field, Philadelphia, due to the limited seating capacity of March Field.

BASEBALL SCHEDULE

Sat., Apr. 5.....	Ursinus
Wed., Apr. 9.....	Gettysburg
Sat., Apr. 12.....	Muhlenberg
*Wed., Apr. 16.....	Temple Univ. (pending)
*Thursday, Apr. 17.....	University of Maryland
*Fri., Apr. 18.....	University of Virginia
*Sat., Apr. 19.....	Washington and Lee
Wed., Apr. 23.....	Dickinson
Sat., Apr. 26.....	Seton Hall or Trinity
*Wed., Apr. 30.....	Fordham University
Sat., May 3.....	University of West Va.
Wed., May 7.....	Rutgers
Thurs., May 8.....	University of Pittsburgh
*Sat., May 10.....	Lafayette
Wed., May 14.....	Villa Nova
Sat., May 17.....	Lafayette
*Wed., May 21.....	Princeton
*Sat., May 24.....	Lafayette
Sat., June 7.....	Bucknell

*Indicates games away.

Captain—R. B. Adams.
Manager—J. Degnan.
Coach—James Baldwin.

LACROSSE SCHEDULE

April 5.....	New York Lacrosse Club
*April 12.....	Rutgers
April 26.....	University of Maryland
*May 3.....	Swarthmore
*May 7.....	Stevens (pending)
May 10.....	Mount Washington
May 17.....	University of Pennsylvania
*May 24.....	Johns Hopkins

*Indicates games away.

Captain—None elected.
Manager—J. Boyle.
Coach—W. T. O'Neill.

WRESTLING

Lehigh's matmen are still contending for places on the team, which will open the season against Princeton on Saturday, January 19. The Freshman team, which is being developed under the tutelage of Harry Gihon, will also open its season against Blair Academy on the same date. Gihon, who was Lehigh's 135-pound man last year, is back in college but not eligible for the team this year. He is putting in his afternoons coaching the Freshmen. It is too early to make predictions yet, but it looks as though Lehigh will have mighty tough competition this year. Columbia and Penn have both improved and Cornell, Yale and Penn State are seemingly as strong as ever. What Princeton has we will find out next Saturday.

Schedule

Jan. 19—	Princeton, at home.
Jan. 26—	Navy, away.
Feb. 16—	Yale, away.
Feb. 23—	Cornell, at home.
Mar. 1—	State, at home.
Mar. 8—	M. I. T., away.
Mar. 15—	Columbia, at home.
Mar. 21-22—	Intercollegiates at Yale.
Manager—	A. J. Hottinger.
Captain—	R. D. Warriner.
Coach—	W. Sheridan.

BASKETBALL

Six straight victories for Lehigh's basketballers seems to indicate a real team this year. In Captain Lingle, Hess, Smith and Weinstein, Lehigh has some real stars. Sprinsteen is an experienced, clever guard, and Gallagher, Ford, Bond, Merrill, Kline and Roberts are all excellent players. The teams played were all from small colleges, but several of them had good teams. Stevens especially is rated high and they were the only team which really made Lehigh extend itself to win. As the boys had no coach during December, the record looks especially good. Here's wishing them luck an February 16 and March 1.

Schedule

	L.U.	Opp.
Dec. 12—	Moravian, home.....	49 19
Des. 15—	Seton Hall, home.....	32 23
Jan. 5—	Stevens, away.....	17 13
Jan. 10—	Albright, home.....	43 19
Jan. 10—	Villanova, away.....	32 19
Jan. 16—	Muhlenberg, home.....	27 22
Jan. 19—	Fordham, home.	
Jan. 23—	Temple, home.	
Feb. 9—	Rutgers, home.	
Feb. 13—	Army, away.	
Feb. 16—	Lafayette, away.	
Feb. 20—	Swarthmore, home.	
Feb. 23—	Rutgers, away.	
Feb. 27—	Gettysburg, home.	
Mar. 1—	Lafayette, home.	

Manager—E. F. Scheetz.
Captain—C. F. Lingle.
Coach—J. Baldwin.

SWIMMING

The opening meet with Syracuse being cancelled on account of being too close to the mid-year exams at Syracuse, Lehigh took on Brown for an opener and certainly "caught a Tarter." Brown last year was the strongest swimming team in the New England States, capturing six out of eight individual titles in the New England Intercollegiates. All six of these men, together with Davy Jones, 100 yard intercollegiate champion, are on Brown's team this year. To cap the climax, Captain Harmon, Lehigh's star swimmer, was taken ill with typhoid fever and the team was in consequence greatly handicapped in this meet. They were beaten 46 to 16 but nevertheless extended Brown sufficiently to cause some extremely fast times to be recorded. Reynolds, for instance, in the back stroke competition, clipped a fifth of a second of the world's record. Astarita, of Lehigh, won the diving contest, giving a beautiful exhibition.

Schedule

Jan. 12—	Brown, away.
Jan. 19—	Army, away.
Feb. 16—	Rutgers, at home.
Feb. 23—	N. Y. Univ., at home.
Feb. 29—	Cath. Univ., away.

Mar. 1—Johns Hopkins, away.
 Mar. 8—Swarthmore, at home.
 Mar. 15—Intercollegiates, at Rutgers.
 Manager—W. W. York.
 Captain—H. G. Harmon.

FENCING

It's a good thing we have no navigable stream or no great amount of cold weather at Lehigh or we certainly would have to provide money for a crew and hockey team. At present we have teams in football, baseball, lacrosse, basketball, track, cross-country, wrestling, swimming, soccer, tennis and golf. Also a rifle team and some agitation for a boxing team. Now comes fencing, which has been started under the tutelage of Mr. Charles H. Behre, Jr., Instructor in Geology. Regular classes have been formed and a tournament is to be held, the winner of which is to be awarded a cup.

LEHIGH MEN WHO WRITE

George W. Wickersham, '77, is the author of a communication printed in the *New York Times* of November 28, 1923, on the legal phases of the case of Controller Craig, which featured the news at that time.

The October issue of the *American Magazine* carries an article by Morris Llewellyn Cooke, M.E., '95 Sc.D. (Hon.), '22, entitled, "It Costs You Money to Be Blue." In it he shows how loss of temper, of cheerfulness, of perspective, all mean loss of money, influence, or position. Cooke is the author of several books and pamphlets, including, "Academic and Industrial Efficiency," "Our Cities Awake," "Business Methods in Municipal Works," and "The Political Assessment of Office Holders."

J. B. Reynolds, '07, is the author of a mathematical treatise on "Vestor Analysis of a Surface," which appeared in the *American Mathematical Monthly* for November, 1923.

HARRY GAY, '10, IS MAKING A RECORD

The *Coal Review* for January 2, 1924, (sent me by H. C. Faust, '14, Gen. Mgr., United Pocahontus Coal Co.) carries an article by Robert M. Lambie, Chief of the Department of Mines, State of West Virginia, in which he claims "for the Gay Coal and Coke Co., of Logan, W. Va., a record unsurpassed in the history of mining." Harry S. Gay, Jr., E.M., '10, has actively managed this plant since 1912. Listen to a few of the facts which Mr. Lambie gives to substantiate his claim.

"This company opened its first mine in the Great Guyan Valley and made its first shipment of coal on Thanksgiving Day in 1904 and has has at the end of 19 years produced over 2,500,000 tons of coal without a fatality. This mine has not been closed down nor has it had a strike and is still under the same active management."

Think of that. Nineteen years without a fatality, without a strike, without a shut-down and under the same management.

Mr. Lambie quotes ten reasons which Gay, as superintendent, gave him for this phenomenal success. One is especially significant: "The company has always had the fullest cooperation from its men." Any company that can truthfully say this can make records, for to win and keep such cooperation for nineteen years is a world record in itself.

Arthur Clay, '05, Drops Engineering and Goes into Business

Arthur S. Clay, after eighteen years of continuous service in the Pennsylvania Highway Department, has resigned and is now in business for himself in Bloomsburg, Pa. He deals in Highway Equipment and Material and there is probably no one in the State that knows more about this line, for he had jurisdiction for years over the State highway work throughout all north-eastern Pennsylvania. When he resigned he was, with a single exception, the oldest official in length of service in the State Highway Department.

The *Harrisburg Morning Press* in a front page article at the time of his resignation said in part, "Mr. Clay has long been recognized as one of the best informed highway men in the State and his long experience will be of incalculable benefit to his clients in the new business in which he will engage."

BUSINESS OPPORTUNITIES

Do You Want a New York Representative?

Lehigh graduate, age 27, five years' experience in office work, buying, selling, would like to represent some manufacturer around New York and vicinity. Give full details in first letter. Address LEHIGH ALUMNI BULLETIN, J-1.

A firm established twenty-five years, doing a seasonal business, desires to handle an additional line of high quality readily salable products, preferably of a chemical or technical nature. Address full details to LEHIGH ALUMNI BULLETIN, J-2.

'21, C.E.

Three years' experience in Bridge Construction. Timekeeper to Superintendent, and all details of Contractor's office work. 24 years old, single. Available at once. Ben Ettelman, 614 So. 5th St., Philadelphia, Pa.



He took the world to her

Twenty-five years ago a boy left a little country town to find his fortune. He found it.

Two years ago, when radio was still a novelty, he took a receiving set back to the old home and set it up in his mother's room. That evening the world spoke to her.

She could not follow her boy away from home. But the best that the world has to give—in music, in lectures, in sermons—he took back to her.



The modern vacuum tube, used in radio transmission and reception and in so many other fields, is a product of the Research Laboratories of the General Electric Company. These Laboratories are constantly working to develop and broaden the service of radio.

GENERAL ELECTRIC

DEATHS

Samuel P. Sadtler, '69

Samuel P. Sadtler, seventy-six years old, nationally known chemist and leader among the laymen of the Lutheran Church, died in Philadelphia, Pa., December 20, 1923, after a long illness. He is survived by two daughters and two sons.

Sadtler in recent years had withdrawn himself more and more from his profession and devoted himself to the Lutheran Church.

He was emeritus professor at the College of Pharmacy and a trustee of the institution. He was a member of the Sons of the Revolution, the Engineers' and the University Club of this city, the Chemists' Club, New York; the American Philosophical Society and the Franklin Institute. He was the first president of the American Institute of Chemical Engineers.

William Hoopes, '86

William Hoopes, aged 57, head of the research and technical department of the Aluminum Company of America, died in Pittsburgh, Pa., January 9, 1924.

The introduction of aluminum for electrical purposes, particularly for high voltage transmission, is credited to the efforts of Hoopes. He placed in successful operation many chemical and metallurgical operations which caused him to be recognized everywhere as an authority in aluminum metallurgy.

For ten years after he finished at Lehigh, he was engaged in the construction of electric railways. He then joined the staff of the Westinghouse Electric and Manufacturing Company.

He became chief electrical engineer of the Aluminum Company in 1900. He has been head of the research and technical departments for the last seven years.

He leaves his widow and a daughter, Mrs. F. Crossman Fittler, of Pittsburgh.

He was a member of the A. I. E. E., the Engineers' Society of Western Pennsylvania, the Pittsburgh Athletic Association, and the Oakmont Country Club.

William Emley Holcombe, '94

William E. Holcombe died in Schenectady on December 20, 1923. Holcombe was confined to

the house from November 7, but his illness did not seem serious for a considerable period, and it was only during the week before his death that his condition became serious. He was with the General Electric Company and was always a staunch supporter of Lehigh. While at college he was a member of the Theta Delta Chi fraternity.

Robert Fulton Crawford, '11

Robert F. Crawford died in Pittsburgh, Pa., on July 1, 1923.

Harry Moses Benjamin, '12

Harry M. Benjamin, of Hazleton, Pa., died December 9, 1923, at the State Hospital, in that city, two hours after he had been found unconscious from gas fumes at his plant, the Benjamin Motor Co., on West Hemlock Street. He had gone to the works to look after some urgent business and it is thought gas had accumulated, overcoming him before he realized the peril.

Benjamin was graduated with honors in the C.E. course. He went to Hazleton to associate himself with his father, the late David Benjamin, in the extensive stripping and contracting business that the latter had established.

He escaped death about seven years ago in an accident at the Ebervale strippings in which his father lost his life.

He is survived by his widow and two children.

Sereno Burnell Overton, '19

S. B. Overton died January 10, 1923, at the Good Samaritan Hospital, Philadelphia, Pa., after an operation for appendicitis. Overton was highly thought of by officials of the Elliott Company, of Jeanette, Pa., and had made an excellent record of progress with that company.

MARRIAGE

Class of 1919

Rollin R. Keim, to Ruth Elizabeth Alleger, of Bethlehem, on December 28, 1923, in Bethlehem.

1925 Epitome

SPECIAL ALUMNI NUMBER

(NO ALUMNUS' HOME COMPLETE WITHOUT ONE)

440 PAGES OF BEAUTIFUL PRESS WORK

Epitomizing in print and pictures the year at Lehigh. Handsomely bound in leather.

Pictures of the Alumnus Trustees. Record of all the Alumni Clubs and their Officers. National Committees and District Chairmen of Endowment Campaign. Pictures of the Alumni Memorial Building.

ALL FOR \$5.00 IF PAID BEFORE MARCH 15

BOOKS READY FOR MAILING APRIL 20

Get a Permanent Record of this Big
LEHIGH YEAR

Make your checks payable to 1925 EPITOME, and mail to

L. B. KINGHAM, Business Manager,
Alpha Chi Rho House,
BETHLEHEM, PA.



—are you sure you deserve it?

“Give me a log with Mark Hopkins at one end of it and myself at the other,” said, in effect, President Garfield, “and I would not want a better college.”

But if Mark Hopkins was an inspired teacher, it is just as true that James A. Garfield was an inspiring student.

Sometimes Garfield’s praise of his professor is quoted in disparagement of present day faculties—the assumption being that we as listeners are sympathetic, all that we ought to be—and that it is the teacher who has lost his vision.

Is this often the case?

It is the recollection of one graduate at least that he did not give his professors a chance. Cold to their enthusiasms, he was prone to regard those men more in the light of animated text-books than as human beings able and eager to expound their art or to go beyond it into the realm of his own personal problems.

This is a man to man proposition. Each has to go half way. Remember, there are two ends to the log.

*Published in
the interest of Elec-
trical Development by
an Institution that will
be helped by what-
ever helps the
Industry.*

Western Electric Company

This advertisement is one of a series in student publications. It may remind alumni of their opportunity to help the undergraduate, by suggestion and advice, to get more out of his four years.

DWIGHT P. ROBINSON & COMPANY
INCORPORATED
ENGINEERS AND CONSTRUCTORS

Design and Construct
Industrial Plants
Power Developments
Railroad Shops
Construct
Office and Apartment
Buildings

125 EAST 46TH STREET
NEW YORK CITY

CHICAGO
LOS ANGELES

PHILADELPHIA
MONTREAL

YOUNGSTOWN
RIO DE JANEIRO

**THE
NATIONAL
LOCK WASHER
COMPANY**



Largest and Oldest Manufacturers
of Spring Washers
in the World

NEWARK, NEW JERSEY, U.S.A.

C. H. Loutrel
Yale '07

R. F. Golden
GeorgiaTech '11

J. Howard Horn
Princeton '07

F. J. Gerbard
Lehigh '13

J. D. Cowan
Princeton '08

PERSONALS

Class of 1875

Prof. A. E. Meaker left Binghamton for Lake Helen, Fla., early this month.

Class of 1876

Lowdon W. Richards has recently purchased a country home on the Wilmington Pike, just outside of West Chester.

Class of 1877

C. R. Rouch, formerly chief chemist for the Lehigh Portland Cement Co., has retired, and is living in Bethlehem.

Class of 1879

45-YEAR REUNION—JUNE 7, 1924

Fifty per cent of the surviving graduates of the Class of '79 have decided on a class reunion next June, and are writing the other 50% (Dick Tucker, Lick Observatory), requesting his attendance.

Billy Hammond, of Harrisburg, is a good sport and he will be on hand, I am quite sure, but as for the remainder of the class there is very little hope of their being present.

Alexander Bell has retired and gone to Europe to live.

W. A. Warren is in the wilds of Siberia, and the Bolsheviks won't let him loose.

Willie Upp, who is reported dead in the Alumni record, was resurrected last year, but as he has failed to respond to the call for the Greater Lehigh Fund, I have concluded that he is really dead this time—at least to the class.

So it looks as if Sargent, Tucker and Hammond may possibly be on hand next June to celebrate the 45th anniversary of graduation.

Yours for Lehigh,

Sincerely,

F. W. SARGENT, '79.

Class of 1883

G. G. Hood, one of our "lost" life members, was never lost at all, but was simply on a trip to Europe, from which he returned just before Christmas.

Class of 1884

40 YEAR REUNION, JUNE 7, 1924

'84 has begun work on the arrangements for the Quadri-decennial Reunion next June. The members surviving the 40-year struggle with old Father Time are so widely scattered from coast to coast and from Mexico to the Great Lakes, that it may be impossible to secure a 100% attendance, but the "live ones" of the bunch will be on deck in spite of adverse mileage and other difficulties, so as to have as large a representation as possible at the get-together dinner of the general alumni on the eve of Alumni Day, and at the Alumni Association meeting. A class dinner on the evening of Alumni Day will be eaten at the Bethlehem Club as usual. Members of the class are urged to communicate at once with A. Parker Smith, 36 West 44th Street, New York, who is acting as secretary of the '84 reunion organization, or with Reggie Radford, Bethlehem Club, who is the "official" host at the class dinners.

Class of 1889

35-YEAR REUNION, JUNE 7, 1924

Just 35 years ago this June since we walked out of old Lehigh. Every man of the class who is alive next June (and we have no dead ones) with feet under them must be back in Bethlehem to walk in the parade, if they can hold us down to a walk, for everyone will want to break into a hop, skip and a jump when we get back on the old campus and are all together again.

It is none too soon to make a start lining the fellows up. Let every man resolve right now to let nothing interfere with this reunion and make his plans to be on the job. All members of the class will hear from me individually further on the subject.

"Rah! Rah! Rah!
Rouge et Noir!
We cry! We cry!
'89!!! Lehigh!!!!"

WM. A. CORNELIUS, Secretary.

Class of 1892

My dear Okeson:

I am enclosing check for \$14.00 for Alumni dues and BULLETIN subscriptions for 1922-23 and 1923-24.

I have recently moved from Nebraska to Des Moines, Iowa, and will be very glad to receive the BULLETIN regularly at 704 Observatory Bldg. here.

During the thirty years and more that have passed since I left South Bethlehem, I have been almost entirely out of touch with Lehigh and her activities, but this, of course, has been no one's fault but my own, and I feel that if I reestablish the contact the years to come will offer something to me in satisfaction that I cannot hope for in any other way.

If there are any Lehigh men, contemporaneous with me, in Des Moines or vicinity whose addresses you have, I would be pleased to know about them. C. M. Case is, I believe, the only '92 man I have run across since leaving college.

With best wishes, I am,

Sincerely yours,

LESTER W. WALKER, '92.

Class of 1894

30-YEAR REUNION, JUNE 7, 1924

"Beiny" is Busy! working out the details for the Class Re-union to be held next June.

Those who were fortunate to be present at the last one will remember with what perfection "Beiny" arranged every little thing conducive to a jolly time and it is safe to say he will not overlook any "best bets" this year to make this "The Reunion of '99." Every man wants to get back, and this is the year to do it. Write "Beiny" at once that you will be there! (25 N. Main Street, Rutland, Vt.)

Class of 1896

Dear Okeson:

I notice on page 16 of the BULLETIN for December, 1923, that you have lost a life member in the person of J. G. Petrikis.

If you will consult the New Jersey division of the New York Telephone Company you will find that he resides at 27 Duryea Road, Upper Montclair. Any one who played second base as he used to be able to should never become lost. In fact, he has gone so far as to attach his initials to the Company with which he is now associated, namely, J. G. White Management Corporation.

Sincerely yours,

THAD MERRIMAN.

Class of 1899

25-YEAR REUNION, JUNE 6, 1924

The Class of '99 is approaching its twenty-fifth anniversary. Gene Grace has already informed "Pop" Klein that he is looking forward to entertaining his classmates at his house next June. He wishes it to be known, however, that this invitation is extended *upon one condition*—That there will be an attendance of 100% of '99's living members. The others, we trust, will be with us in spirit.

Those members of the Class who were so fortunate as to be present at the reunion dinner given by "Gene" five years ago will leave no stone unturned to be there this time, and the poor cusses who did not get there have heard of the royal time which they missed and may be depended upon to show up on this next class birthday. "Pop" Klein has been commissioned to work up the celebration. So come on, fellows, and show your appreciation of the class and its distinguished president.

Class of 1904

20-YEAR REUNION, JUNE 7, 1924

A very important event will take place in Bethlehem coming June, the twenty-year reunion of the Class of 1904.

This will without question be the most successful reunion ever held by any class, the best attended, most spectacular and most enthusiastic reunion ever held at the University.

Preliminary arrangements are now being made for the reunion and the committee will be announced in a short time.

Modesty prevents talking much about the class in a public announcement of this kind, but it



Overhead and Out of the Way

Wilson Rolling Steel Doors are made in various designs and applications for protecting openings against fire, weather and theft. They roll overhead, out of the way, and afford maximum useful floor space. Maybe operated by hand, gearing or electric motor.

Approved and labeled by the Underwriters' Laboratories, Inc., Chicago, Ill. Catalog, details, and prices will be forwarded on request.

THE J. G. WILSON CORPORATION

Established 1876

11 East 36th St., New York City

Offices in Principal Cities

J. F. Middledith, '99, Treasurer.



is probably advisable to say that the Class of 1904 was without question the best class that ever was graduated from the University, and also turned out some good men.

We request that all members on receipt of this BULLETIN mark the date of commencement on their calendars so that other relatively unimportant matters may not interfere with their attending.

GEORGE BAILY.

J. H. Brillhart has taken a position as manager of the Fort Worth Steel Machinery Co., Fort Worth, Texas.

Class of 1906

H. H. Lauer has moved from Allentown to 7041 McCallum Street, Philadelphia.

Class of 1909

15-YEAR REUNION, JUNE 7, 1924

Has every '09 man made up his mind to be on hand when the Roll is called on Alumni Day, June, 1924? If there is such a man, let him close his eyes, think back fifteen years and let the itching sensation take hold. Let him then open his eyes and begin to make his plans; the big idea is to start making plans early so that all business may be cleaned up and all hands be present. There are several fellows whose addresses are unknown, they are as follows:

Boyd, W. W.	Lobb, H.
Broad, W. T.	Logan, G. R.
Cannell, H. S. Jr.	Lores, J.
Conklin, J. M.	Luckie, J. B.
Cunningham, S. L.	Lyne, G. H.
Dech, H. F.	McMurtrie, A. J.
Digby, C. B.	Maeder, W. A.
Dowling, R. D. T.	Mueller, F. R.
Drake, J. B.	Nagle, W. O.
Durns, A. H.	Ricksecker, P. E.
Earnshaw, W. A.	Ridgely, J. T.
Eckert, C. M.	Robertson, F. F.
Elwood, E. R.	Saenz, C.
Fluharty, W. G.	Sauber, C. B.
Focht, H. M. S.	Schimpf, H. H.
Fraser, K. C.	Schiverea, W. J.
Geno, J. R.	Schmertz, E. C.
Glover, C. N.	Shoemaker, H. M.
Gordon, P.	Sill, A. P.
Greenough, L. C. D.	Simmins, H. C.
Havenstein, P. W.	Smith, W. A.
Heilman, J. C.	Sparks, E. E.
Himes, W. L.	Valerio, L. J.
Hollister, J. F.	Valerio, R.
Kuschke, J. L.	Watson, H. L.
Lawyer, C. M.	Williams, T.

If anybody knows where these fellows live, please advise the Alumni Office, as we wish very much to remind them of the fact that they are now fifteen years older than they were when they left the Campus as '09 men.

We are particularly anxious to find these fellows, because it will make our Reunion better to have a few of the lost sheep come into the fold at this time.

D. M. PETTY.

W. H. Phillippi is with the Lackawanna Steel Construction Co., at Buffalo, N. Y.

Fifty-two names on the '09 class list for whom we have no address! And gosh-all-hemlocks, this is '09's reunion year! If you fellows who are reading this could see the pleased smile on Dave

Petty's face when he gets an address for a lost oh-niner, you'd think back and write him a letter telling him where you last heard of any of the gang. Naught-nine will stage a good one in June, no doubt about that. So tell Dave where some of those strayed sheep are, and let them in on the doings.

Class of 1913

A. T. Ward has, of January 1, 1924, transferred his office to No. 1 Broadway, New York, where he will continue his business as New York representative of a group of Pennsylvania and West Virginia coal producers for both domestic and export tonnages.

C. B. Rafter announces the removal of his consulting office to 312 Insurance Building, Washington, D. C.

Class of 1914

10-YEAR REUNION, JUNE 7, 1924

The Class of 1914 will this year celebrate its ten-year reunion with all attending ceremonies and jollifications. Plans are now being made which will soon be broadcasted to all the members of '14. Our primary object will be to get as many of the class back, in June, as possible; all other forms of celebration will be secondary to this. However, any of the class having any novel or interesting ideas are urged to write and tell them to either Geo. Flick, 740 Pawnee Street, or Walter Schrempel, 1105 Delaware Avenue, in the old home town. These two guys will temporarily handle the plans of the reunion until a regular committee is selected.

We had a 98% average in last year's Class Guaranty Fund Campaign and we want every one of those 98% plus the remaining 2% to show as much pep and enthusiasm in our reunion as has been shown in these class drives of the past few years. Let us all get behind this 10-year affair and make it a grand success.

SCHREMPEL.

Just as we go to press a letter arrives from George Flick, Class President, appointing the following Reunion Committee: Walter Schrempel, Hunt Weber, William Todd, Walter Quast, Richard Gifford and Stephen Burns.

Dear "Okey":

Wishing to start the New Year with a clear mind, I am enclosing my dues. Also please note change in street address.

Is Schrempel going to handle our 10th year reunion? He is the logical man and the ball should be started rolling *now*.

H. E. DEGLER.

Ezra Bowen has been appointed chairman of the Civil Service Commission of the City of Easton.

Class of 1916

Eddie Clare has taken the position of sales manager of the Athol Manufacturing Co., at Athol, Mass.

Joe Wyler is research chemist with the Trojan Powder Co., in Allentown.

Class of 1917

J. M. Rapaport has gone into partnership with

NEW YORK SEWAGE DISPOSAL COMPANY

5621 GRAND CENTRAL TERMINAL, NEW YORK

Engineers and Contractors

Geo. L. Robinson, '00, Pres.

Ben. E. Cole, '13, Vice-Pres.

Samuel T. Mitman, '19, Engineer

Carrier Engineering Corporation



750 FRELINGHUYSEN AVE. NEWARK, N. J.

E. T. MURPHY, '01, VICE-PRESIDENT

W. A. BORNEMANN, '17,

PHILADELPHIA, PA.

HUMIDIFYING, DEHUMIDIFYING, COOLING, AIR WASHING, AUTOMATIC TEMPERATURE AND HUMIDITY REGULATION.

A Fifteen-Year-Old Boy

(By Strickland Gillilan)

THERE is just one thing in the world finer than being a fifteen-year-old boy — it is owning one. I'm the lucky one in this case. My boy will be fifteen next Christmas (yes, he was a fine present), and do you know what I'm going to do right afterward?

I'll tell you:

I'm going to take out an endowment policy on his life. And now I'll tell you why:

He's probably going to college some day. That'll cost me money. I don't begrudge it. He has to have his equipment for life in competition with a lot of school-taught chaps. It is money well-spent. Like life insurance premiums, it is an investment and not an expense. It will help him acquire the ability to help himself. Maybe later on he will amount to a great deal more than I think I amount to at present.

After college, he will be starting out on his own hook. Paddling his own canoe and all that. And if he's even as smart as I am, he will be

carrying some life insurance.

Therefore:

If I take out insurance on his life (which I can do when he has turned fifteen), I can get it at a very low rate. And what does this do? Well, (a) if the lad were to meet with some fatal misfortune before the finish of his college career (and some do), I should be financially reimbursed for the cost of his education to date; (b) if he were to lose his health, I should have provided him with a policy he could not get later; (c) and if (as I verily believe, in my faith and hope and love for him) he should live to complete his schooling and settle down in a home of his own, he will have insurance protection at a rate so low (owing to accumulated dividends) as to be almost negligible.

See?

Now if you can discover any way in which the above plan is unwise, write and tell me. Personally, I can't see anything but wisdom and profit in the scheme.

John Hancock
MUTUAL
LIFE INSURANCE COMPANY
OF BOSTON, MASSACHUSETTS

Sixty-one years in business. Now insuring One Billion Seven Hundred Million dollars in policies on 3,250,000 lives.

The Bethlehem Preparatory School

A SCHOOL OF HIGH SCHOLASTIC
STANDING

Every opportunity given the student to
make rapid progress and save time.

1600 boys prepared for leading univer-
sities in 43 years.

All branches of athletics.

Write for catalogue.

JOHN MITCHELL TUGGEY
Head Master

Hon. Clinton A. Groman, for the practice of law,
with offices in the Colonial Bldg., Allentown.

Class of 1918

S. L. Chang sends in his class dues with a note written across the bill. My, but that handwriting looked good to me. How many times I've scanned it—trying to get something out of one of Bab's lectures that I slept through, or copying a met problem. It was almost like seeing him again. He's still with the Hanyang Iron & Steel, in China and as he doesn't say in what capacity, I presume it's modesty and guess he's the president, or chairman of the board, anyway.

"Measles" just moved into a peach of a little house out in Brooklyn a little while ago. The night I was there, we needed a gondola to get to it, but once there everything was 100%. Look him up when you're in New York, and maybe Mrs. Mizel will make some waffles for you.

Gordon F. Jones is with the Westinghouse Electric and Manufacturing Co., on automatic sub and generating stations. The sun-of-a-gun has been married for a year and I just heard about it!

"Bill" Tizard and "Whitey" Lewis are holding occasional and informal Lehigh reunion out California way. Bill is in Long Beach right now (I think,—he was a week ago), working up a treatise on the relation of the bathing beauty to the petroleum industry. Don't know just what Whitey's doing. Helping collect data, I guess.

Who breezes in the other day but "Bob" Wolcott, looking fine, feeling prosperous and natural as life. He was north on business for Luken's Iron & Steel, but stepped right out for New Orleans, where he claims there's a lot of work waiting for him. It was mighty good to see him.

Class of 1919

'19 REUNION—5TH YEAR

"Hellow there, old timer, glad to see you again. It has been five years since I saw you."

Are you going to be back in June? It has been five years since we left. Some have been back frequently, but others have not been back since they left. Let's make Beslem think it is September, 1915, by the way, '19 rolls off the train on

BRILLHART-BROTHERS COMPANY and F. H. CLEMENT & COMPANY

Announce that after July 1st, 1923, these two companies will be
merged into the

F. H. CLEMENT & CO.

A corporation chartered under the laws of Pennsylvania

The organization and operating personnel of each of the former
companies will be retained and the new company will solicit rail-
road and general building construction.

OFFICES—Wilbur Trust Bldg., Bethlehem, Pa.
Stephen Girard Bldg., Philadelphia, Pa.

Equipment Yard—Bingen, Pa.

E. T. Gallagher D. H. Brillhart, '06 G. R. Brothers, '08. J. F. Keator, Jr.

BETTER LIGHTING NEEDED IN INDUSTRIAL PLANTS

In a paper read before the Illuminating Engineering Society, February, 1920, entitled, "A Survey of Industrial Lighting in Fifteen States," R. O. Eastman, submitted some very interesting data regarding the lighting conditions in industrial institutions. The survey comprises some 446 institutions, in which lighting was considered by 55.4% as being vitally important, and by 31.6% as being moderately important, and by 13% as being of little importance. Practically 58% considered that lighting was as important as power in the operation of the plant, and a small proportion would give more attention to lighting than to anything else.

In considering the present condition of lighting as found in the various plants, only 9% ranked as excellent, about 1/3 ranked as good, 29% fair, 18.8% poor, 3.5% very poor, and 7.8% partly good and partly poor. It was found that the lighting in the offices was far superior to that in the shops; 19% being excellent, 36% good, 31% fair, and only 13% poor and none very poor.

On consulting the executives regarding what factors were most important in considering lighting, the following facts were revealed: Increase of production 79.4%, decrease of spoilage 71.1%, prevention of accidents 59.5%, improvement of good discipline 51.2%, and improvement of hygienic conditions 41.4%. Manufacturers who have good lighting appreciated its value largely from the standpoint of its stimulating effect upon output.

There is no question that any intelligent man who carefully considers the necessity for good lighting in an industrial plant, will agree that it is impossible for a person to do as good work, either in quality or quantity, in poor light as in good light, but yet the result of a careful analysis discloses the fact that only about 40% of industrial plants are furnishing good light to their workers and 60% are operating under poor lighting. It is hard to understand why such a proportion of concerns can be satisfied with a condition which is universally admitted to be a curtailer of efficiency and a prolific causer of accidents. The principal cause of this condition is that those in charge of such establishments have not given the attention to lighting that it demands. They do not know what constitutes good lighting, and in their absorbing interest of other factors of production have overlooked a vital one.

Every safety official should deeply interest himself in the lighting of his plant and insist upon good lighting as much as good goggles, good guards and other necessary accident prevention equipment. Every production manager should insist upon good lighting because the efficiency of the working force is increased by the condition of the lighting furnished. The plant physician should examine the lighting, for eye strain and eye fatigue are directly affected by poor lighting, as is the hygienic condition. Well lighted plants are invariably cleaner than poor lighted places. Plants equipped with Factrolite Glass in all windows are well lighted.

If you are interested in the distribution of light through Factrolite, we will send you a copy of Laboratory Report—"Factrolited."

MISSISSIPPI WIRE GLASS CO.,

220 Fifth Avenue,

St. Louis.

New York.

Chicago.

Friday, June 6.

It is going to be a whale of a celebration, you can't afford to miss it. This is the start, you will hear more later.

Class of 1920

E. D. Hollinshead is gas engineer, at 446 Market Street, Newark, N. J.

Dear "Okey":

You sign yourself so and that's your name and so here goes.

Your letters have been following me around the country and I only received several together just the other day. I knew Lehigh had started a drive and wondered if I had been left out. This is all I can see my way clear to do now, I wish it might be more.

The best of success to you and Lehigh in this undertaking.

I am now located with the West Virginia State Road Commission and am located temporarily at Petersburg.

Sincerely,
HAROLD H. DEWHIRST.

Class of 1921

D. G. Maraspin is with the H. A. Johnson Co., of Boston. They sell "everything that a baker needs (except flour and lard) from a bread pan to Franklin Baker's coconut."

Class of 1922

G. M. Menezes has sailed for Brazil as a Civil Engineer for the American Rolling Mill Co. Address: Caixa Postal No. 19, Rio de Janeiro.

E. G. Robison is employed by the Goheen Corp. of N. J., 149 Broadway, New York City.

Class of 1923

FIRST REUNION—JUNE 7, 1924

Boys, take a look at that record of ours in this class guarantee trick of Okey's. We may be new

at it, but it sure looks like we have the combination.

Well, you knew it and I knew it. On June 7 we demonstrate it to the rest of the Lehigh world. Every man in the class is going to make tracks for Bethlehem to help stage the first reunion party—the first for '23, the first in size and the first one that ever stood out so far above the average class reunion that other classes will try to equal our record for the next four years, when we'll come back again and beat it ourselves.

But that's getting ahead of the story. The main thing now is to make a big red ring on your calendar around June 6. That's Friday. You'll want to get to Bethlehem that evening to get your stride for the big doings the next day.

'23 doesn't need any urging. We'll be there, that's all.

H. C. Bieg is an engineer with Irwin & Leighton, in Philadelphia.

C. N. Bradley is studying at the Harvard Graduate School of Business Administration. Address: 16 Wendell Street, Cambridge, Mass.

J. W. Carey is Assistant Plant Engineer with the Congoleum Co., of Camden, N. J.

W. A. Carlisle is Assistant Sales Manager with the Coal Hill Mining Co., at DuBois, Pa.

Charlie Forstall has wasted a lot of nice stationery with his address printed at the top, as he has moved from Elizabeth, N. J., to 717 N. 6th Street, Harrisburg, Pa.

L. K. Harkins is teaching algebra, biology and science in the East Pittsburgh High School. Address: 1612 West Street, Homestead, Pa.

G. D. McConnell has a position with the N. S. Refractories Corp., at Mt. Union, Pa.

J. A. Thomas is employed as Mining Engineer with the Atlas Portland Cement Co., at Northampton, Pa.

A. G. Wuetrich is still with the New Jersey Zinc Co., but has been transferred to Depue, Ill. Address: Box 342.

ROBIN'S SYSTEMS FOR HANDLING BULK MATERIALS



We are prepared at all times to undertake the design, manufacture and erection of complete material-handling equipment

Belt conveyors — Belt and bucket elevators — Coal and Coke crushers — Loading and unloading towers — Stocking and re-claiming bridges — Skip hoists — Rotary grizzlies — Screens, etc.

Write for HANDBOOK OF CONVEYOR PRACTICE

ROBINS CONVEYING BELT COMPANY

THOMAS ROBINS,
President

C. KEMBLE BALDWIN, '95,
Vice-Pres. and Director of Sales

THOMAS MATCHETT,
Vice-Pres. and Gen. Mgr.

15 PARK ROW, NEW YORK

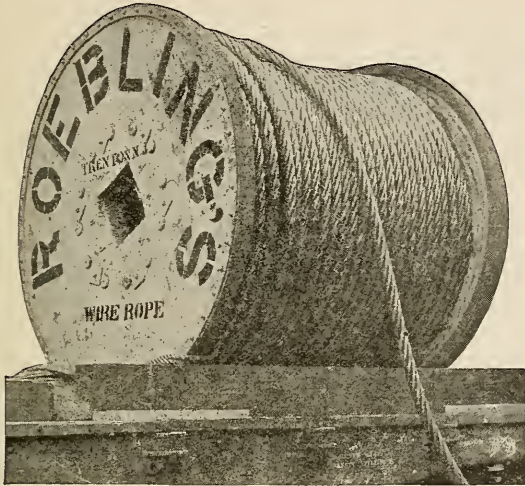
CHICAGO

PITTSBURGH

PHILADELPHIA

BOSTON

ROEBLING



WIRE ROPE

WIRE ROPE FITTINGS
WIRE ROPE SLINGS
WELDING WIRE

JOHN A. ROEBLING'S
SONS COMPANY

Trenton, New Jersey

USE "LIMOID" for ECONOMY

In Laying Brick with cement-mortar an addition of "Limoid" (pure "Cedar Hollow" hydrated lime) to the mortar mixture will enable bricklayers to lay more bricks per hour and will give a better bonding mortar.

In placing Concrete an addition of "Limoid" will give a faster flowing mass which will be freer from "honey-comb" and weak sections.

Charles Warner Company

FRED. A. DABOLL, '96, Mgr., Line Products Dept.

Wilmington, Del.

Philadelphia, Pa.

New York City

Newport Chemical Works, Incorporated

— SELLING —

DYES

INTERMEDIATES

PHARMACEUTICALS

CHEMICALS

MANUFACTURED BY

THE NEWPORT COMPANY

CARROLLVILLE, WIS.

JOHN W. SHAEFFER, '01, PRESIDENT

MAURICE T. COAKLEY, '12

JOHN MCKAY, '18

POOLE & MCGONIGLE

ENGINEERS AND MANUFACTURERS

STRUCTURAL STEEL FOR BRIDGES, BUILDINGS, ETC.

CHARLES MCGONIGLE, '01.

OTHO POOLE.

PORTLAND, OREGON.

POOLE-DEAN COMPANY

INCORPORATED 1911

STEEL CONTRACTORS

ERECTORS OF BRIDGES AND BUILDINGS

PORTLAND, OREGON

OTHO POOLE.

CHARLES MCGONIGLE, '01

LEVERING & GARRIGUES CO.

552 W. 23d STREET

BOSTON, MASS.

NEW YORK

HARTFORD, CONN.

STEEL CONSTRUCTION

DESIGNERS, MANUFACTURERS

ERECTORS OF STEEL STRUCTURES

ENGINEERS AND GENERAL CONTRACTORS

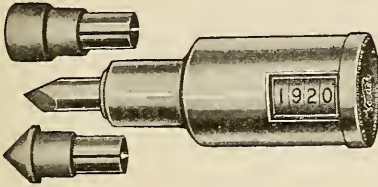
FOR INDUSTRIAL BUILDINGS

L. L. GADD, '94, Vice-President.

R. F. GADD, '93, New Eng. Mgr.

Veeder

Products: CYCLOMETERS FOR BICYCLES AND MOTORCYCLES, TO RECORD DISTANCE TRAVELED; ODOMETERS FOR MOTOR TRUCKS AND HORSE-DRAWN VEHICLES, TO REGISTER MILEAGE; COUNTERS FOR RECORDING THE PRODUCTION OF MACHINES; SPEED COUNTERS FOR COUNTING REVOLUTIONS (PER MINUTE) OF SHAFTS OR FLYWHEELS; TACHOMETERS FOR INDICATING IN REVOLUTIONS-PER-MINUTE THE SPEED OF MOTORS, PRIME MOVERS, GENERATORS OR ANY REVOLVING PART. ALSO FINE DIE CASTINGS WHEREIN ABSOLUTE ACCURACY AND UNIFORMITY ARE REQUIRED.



The No. 21 Speed Counter shown at left registers number of revolutions (per minute) of a motor, engine, dynamo, line shafting, machine spindle or any revolving part. The point is held against the end of the revolving shaft; the instrument pressed lightly when count is commenced; pressure released when the timing is over. Push-clutch starts or stops recording mechanism instantly, giving exact R. P. M. readings without use of stop-watch. Price, \$3.50

Veeder Counters are made for every machine that should have one—all the models are shown in the Veeder counter booklet. Special circulars describe the other Veeder products; write for any or all of them.

The Veeder Mfg. Co., 20 Sargeant Street,
HARTFORD, CONN.

FLECK BROS. Co.

Manufacturers and Dealers

PLUMBING and HEATING SUPPLIES
FOR EVERY KIND OF BUILDING



SANITARY SPECIALTIES, FACTORY EQUIPMENT,
WROUGHT PIPE, VALVES, SCREWED FITTINGS,
WATER SUPPLY SYSTEMS, SEPTIC TANKS,
BOILER RADIATORS, PIPELESS FURNACE.

GENERAL OFFICES

50 N. FIFTH STREET
529 ARCH STREET
1645 N. AMERICAN STREET
PHILADELPHIA, PA.

JOHN G. FLECK, '90
VICE-PRES. & GEN. MGR.
G. B. LAPISH, '19
PUR. AGT. READING BR.

BRANCHES

LANDSDOWNE, PA.
CAMDEN, N. J.
BALTIMORE, MD.
NORFOLK, VA.
READING, PA.
ALLENTOWN, PA.
EASTON, PA.
MACUNGIE, PA.

THE PHOENIX IRON CO.

Manufacturers of Open Hearth

Structural Steel Shapes

Works:

PHOENIXVILLE, PA.

Main Office:

PHILADELPHIA, PA.

Offices: 22 S. 15th St., Philadelphia. 110 State St., Boston.
132 Nassau St., New York. Chamber of Com. Bldg., Rochester.
Munsey Building, Washington, D. C.

THE PHOENIX BRIDGE CO.

Engineers and Builders of

Bridges and Other Structures of Steel

Bridge Works, PHOENIXVILLE, PA.

Established 1790

Capacity 75,000 Tons per Annum.

W. R. HALL, '02, ASST. ENGR.,

BRIDGE DEPT.

W. H. ELLIS, '09, ASST. ENGR.,

ERECTION DEPT.

W. E. STURGES, '10, RES. ENGR.,

WASHINGTON OFFICE

RICHARDS & GASTON, INC.

ENGINEERS AND CONTRACTORS

RAILROADS, BRIDGES,
STEAM SHOVEL WORK, ETC.

OFFICE SHOPS AND YARD.

110 SOUTH BRIDGE ST., SOMERVILLE, N. J.

LOUIS P. GASTON, '88, PRES.

H. G. VANDERVEER, '03
S. B. RICHARDS, '20

THE ROWAN CONTROLLER COMPANY

MANUFACTURERS OF

AUTOMATIC MOTOR CONTROL

PRESIDENT, J. S. ROWAN, '10
SALES MANAGER, W. C. JACKSON, '10

BALTIMORE

THE R. G. JOHNSON COMPANY

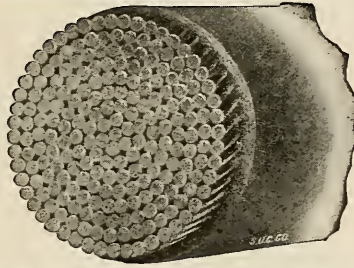
CONTRACTORS AND ENGINEERS

SHAFTS, SLOPES
MINING CONSTRUCTION

PITTSBURGH, PA.

R. G. JOHNSON, '04, PRES.

C. H. DORSEY, '08, TREAS.



5,000,000 C. M. WEATHERPROOF CABLE ($\frac{1}{2}$ ACTUAL SIZE)

Standard Underground Cable Co.

Manufacturers of

Copper, Brass, Bronze Wire
Copper Clad Steel Wire
Magnet and Weatherproof Wire
Rubber Insulated Wire

Lead Covered Cables
Armored Cables
Cable Terminals
Cable Junction Boxes, etc.

Complete information on request to our nearest office

Boston	Washington	Detroit	Los Angeles
New York	Atlanta	Chicago	Seattle
Philadelphia	Pittsburgh	St. Louis	Kansas City
	San Francisco		

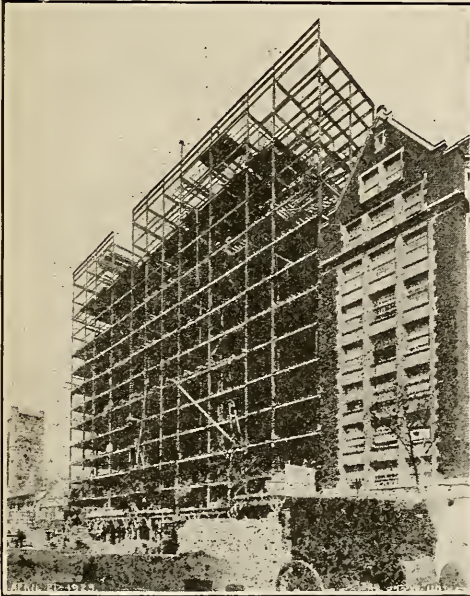
For Canada: Standard Underground Cable Co.
of Canada, Limited, Hamilton, Ont.

WITH THE COMPANY:

P. H. W. Smith, '92

Vice Pres

G. J. Shurts, '12



Apartment House, 529-41 Cathedral Parkway, New York City

Bethlehem Fabricators

INC.

OFFICE AND WORKS
BETHLEHEM PENNA.

STRUCTURAL STEEL
FABRICATORS
AND ERECTORS

AGENTS

BALTIMORE, MD.
BRIDGEPORT, CONN.
CLEVELAND, O.
DALLAS, TEXAS.
HAZLETON, PA.
LYNCHBURG, VA.
NEW YORK, N. Y.
PHILADELPHIA, PA.
SCRANTON, PA.
WASHINGTON, D. C.

R. P. Hutchinson,	'04
J. H. Traeger,	'03
C. H. Bender,	'12
Leonard Savastio,	'13
G. M. Overfield,	'14
F. L. Stephenson,	'16
E. J. Whims,	'22
J. L. Lees,	'23

Bethlehem Foundry & Machine Company

GENERAL FOUNDERS AND MACHINISTS

BETHLEHEM, PENNA.

W. A. WILBUR, President

J. GEORGE LEHMAN, '96,
1st Vice Pres. and Gen'l Mgr.

ROBT. E. WILBUR, '04,
Asst. to Gen'l Mgr.

I. E. KRAUSE, Sec'y and Treas.

C. L. McKENZIE, '93, Pres.

C. C. BURGESS, '95, Chief Engr.

PITTSBURGH CONSTRUCTION CO. **GENERAL CONTRACTORS**

DIAMOND BANK BUILDING

PITTSBURGH, PA.

STEEL BRIDGE ERECTION, CONCRETE MASONRY, Etc.

C. L. McKENZIE, '93, Pres.

C. C. BURGESS, '95, Asst. Engr.

CONCRETE PRODUCTS COMPANY **OF PITTSBURGH**

DIAMOND BANK BUILDING

PITTSBURGH, PA.

**REINFORCED, FACTORY-MADE,
CONCRETE CULVERT PIPE,
EMBANKMENT CRIBBING, ETC.**

Alan C. Dodson, '00
T. M. Dodson, '00
G. R. Radford, '84
C. S. Kenney, '10
H. B. Tinges, '12



**ANTHRACITE
and
BITUMINOUS
COAL**

GENERAL OFFICES, BETHLEHEM, PA.

THE LEHIGH COAL AND NAVIGATION COMPANY

**437 CHESTNUT STREET
PHILADELPHIA, PA.**

Miners of Old Company's Lehigh Coal

Since 1820

SAMUEL D. WARRINER, '90, President

Does your own family know what
you sell?

Tell your story to our Lehigh family

ADVERTISE IN THE BULLETIN

PROFESSIONAL CARDS

New York City 15 Park Row
**FORSTALL, ROBISON AND
 LUQUEER**
 Consulting Engineers
 Public Utilities Problems
 Alfred E. Forstall, '83
 Robert O. Luqueer

Washington, D.C. 916 G St., N.W.
JAMES A. WATSON, '84
 Patent Lawyer

St. Louis, Mo. 711 Clark Ave.
ROBERT W. BARRELL, '87
 President
St. Louis Sampling & Testing Works
 Chemists, Metallurgists and Mining Engineers
 All kinds of analyses, investigations, exam-
 inations and reports in these lines made
 promptly and carefully

Philadelphia 112 N. Broad Street
J. W. LEDOUX, '87
 CONSULTING ENGINEER
**Water Works, Water Power, Reports, Designs,
 Construction, Supervision, Valuation,
 Arbitration, Rate Schedules**

New York City 15 Park Row
CLARENCE W. HUDSON, '89
 Consulting Engineer
 Designs, Supervision, Estimates,
 Reports on All Classes of Structures

ASA E. PHILLIPS, C.E., '90
 CONSULTING ENGINEER
 SPECIALIST IN CITY PLANNING, PARKS AND
 MUNICIPAL WORKS
 26 Jackson Place, Lafayette Square
 WASHINGTON, D. C.

New York City 50 Church St.
ALEXANDER POTTER, '90
 Consulting Engineer
 Hydraulics, Sanitation, Concrete
 Structures
 Tel.: 5501 Cortland

Washington, D. C. Ouray Bldg.
O'NEILL & BUNN
 Patent Law
 Charles J. O'Neill, '93

Pittsburgh 1st National Bank Bldg.
BATON & ELLIOTT
 Consulting Engineers
 Reports on Western Mining Property
 G. S. Baton, '94 J. R. Elliott

New York City 363 Lexington Ave.
VISSCHER & BURLEY
 Architects
 T. C. Visscher, '99 J. L. Burley, '94

CADWALLADER EVANS, JR., 1901
 Consulting Engineer
COAL
 717 Connell Bldg. Scranton, Pa.

Woolworth Bldg.
 New York City 233 Broadway
WARD, CROSBY & SMITH
 Patent Lawyers
 Dyer Smith, '03

WASHINGTON, D.C. NEW YORK CITY
 514 Union Trust Bldg. 9099-91.0 Metropolitan Bldg.
H. J. JACKSON, '08
 Agent
THE NORTHWESTERN MUTUAL
 Life Insurance Company
 of Milwaukee, Wis.

This Space is Waiting for
 YOU

AMERICAN CAR AND FOUNDRY COMPANY

DESIGNERS AND BUILDERS
OF PASSENGER AND FREIGHT
CARS OF ALL TYPES

NEW YORK

CHICAGO

ST. LOUIS

WILLIAM CARTER DICKERMAN, '96
VICE-PRESIDENT IN CHARGE OF OPERATION

FRANK FAUST, '94
DIST. MGR. MILTON, PA., DISTRICT

HASELL WILSON BALDWIN, '96
ASST. DIST. MGR. BUFFALO DISTRICT

CHARLES LOOMIS ROGERS, '83

BETHLEHEM STEEL COMPANY

PLANTS AT

Bethlehem, Reading, Lebanon, Steelton, Johnstown,
and Coatesville, Penna.
Sparrow's Point and Baltimore, Md.
Lackawanna, N. Y.

General Offices: BETHLEHEM, PA.

SALES OFFICES:

New York, Boston, Philadelphia,
Baltimore, Washington, Atlanta, Pittsburgh, Buffalo,
Cleveland, Detroit, Cincinnati, Chicago,
St. Louis, San Francisco

E. G. Grace, '99	President
Archibald Johnston, '89	Vice-President
H. S. Snyder	Vice-President
C. A. Buck, '87	Vice-President
H. E. Lewis	Vice-President
Quincy Bent	Vice-President
R. E. McMath	Secretary
W. F. Hartmann	Treasurer
F. A. Schick	Comptroller